



LEONARD S. RUBENSTEIN

E-mail: lrubenst@jhsphe.edu

Phone: 443.287.8749

## Toxic Legacy: Hunger, Oppression, Migration, and Health in the Democratic People's Republic of Korea

### Summary

- During the 1990s, economic mismanagement, political oppression, natural disaster, and loss of external subsidies after the end of communism led to a calamitous decrease in food production in the Democratic People's Republic of Korea (DPRK). The public health infrastructure, including water and sanitation systems, drug distribution and supply chains, and local clinics and hospitals, also deteriorated. At least half a million people died of starvation and millions more suffered acute or chronic malnutrition. Malnutrition increased vulnerability to disease at a time when the health system was incapable of effective response.
- Fifteen years later, neither health nor the food systems have recovered as the economy persistently stagnates. Health continues to be a low priority for the government. The availability of food is insufficient to meet population needs, hospitals and clinics are significantly ill-equipped, the medical workforce lacks appropriate training, and corruption in drug distribution is pervasive. Malnutrition and anemia, as well as diseases associated with poor sanitation, remain widespread.
- Over the last few years, DPRK has begun to accept international assistance to address health system needs, most notably to vaccinate children. Although these initiatives address some infrastructure needs, the continued centralized control of health and the lack of open discussion about key issues renders the possibility of reforms sufficient to meet the health needs of the people of North Korea dim.
- During the economic crisis, tens of thousands of North Koreans migrated to China despite harsh measures imposed by both governments to restrict border crossing and a refusal by China to give legal status to the migrants. To a limited extent, migration ameliorated the health impact of the crisis by stimulating illicit cross-border trade and informal markets that increased some North Koreans' access to food. Even after a disastrous effort by the DPRK government to shut the markets down in 2009, they are re-emerging. China's encouragement of these markets, along with regularizing the status of migrants in China, could advance its own economic interests as well as contributing to improving the health of North Koreans.

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The economic crisis that began in the 1990s has lingered for years after its acute phase ended. The crisis led to a huge decline in food production and an erosion of the nation's health infrastructure, with enduring health consequences. It also spurred migration to China and the unexpected

emergence of informal markets that have had a modest impact on, and have greater potential for, the health of North Koreans, especially in the severely impoverished northern part of the country. These developments are sure to have an impact on North Korea's economic prospects, its ability to provide for the health and nutrition needs of its population, and its potential to reunify successfully with the Republic of Korea. It also raised questions about the role of the international community in addressing the failed health system and ongoing humanitarian need in DPRK. To address these questions, USIP's Health and Peacebuilding Working Group convened a panel consisting of Gilbert Burnham and W. Courtland Robinson, both from the Center for Refugee and Disaster Assistance at the Johns Hopkins Bloomberg School of Public Health, and John Park, director of USIP's Korea Working Group. The panel met on October 19, 2010, and Leonard Rubenstein, the coordinator of the Health and Peacebuilding Working Group, moderated the discussion.

## Economic Collapse and its Health Consequences

In the early 1990s, the economy of the DPRK collapsed as a result of mismanagement, resistance to reform, obsolescence of the industrial base, natural disaster, loss of subsidies from states that no longer had communist governments, and political repression. Food production declined catastrophically. The government refused to acknowledge the scope of the shortfall and open itself to the level of humanitarian assistance needed to cope with the crisis. At least 500,000 people, but perhaps as many as three million, starved to death.<sup>1</sup> Since the source of the crisis has never been addressed, the result has been an ongoing shortage of food estimated to affect more than 5 million in a population of 24 million.<sup>2</sup> An estimated 30 percent of children under the age of six are malnourished, and up to 45 percent experience inadequate growth or stunting.<sup>3</sup> Almost 30 percent of pregnant and lactating women are malnourished and anemic.

The ongoing economic calamity also undermined the health infrastructure. Except in the capital, Pyongyang, medical facilities are poorly equipped, lacking even such basic supplies as X-Ray films, water, electricity, and heat. Even basic services, like emergency obstetrical care, are limited in provincial clinics and hospitals. Though ostensibly free, drugs are in short supply, spawning a medical black market and the need for patients to pay doctors to obtain medications. The inconsistent drug supply has likely led to strains of drug-resistant tuberculosis. As in communist systems of the past, North Korea has no shortage of health workers, and operates 10 medical universities, but the quality of training is poor and outdated. Of the small number of doctors who defected to South Korea, only one has reportedly been able to pass the South Korean medical licensure exams. The DPRK government has invested very little in health since 1990 and it currently ranks near the bottom globally in health investment as a percentage of gross domestic product.<sup>4</sup> The only aspect of the health system that appears to be intact is the childhood vaccination program, which has been supported by the Global Alliance on Vaccines and Immunizations (GAVI) since 2004. Even that program, however, is hampered by deficiencies in transport and storage, and lack of proper management capacity.<sup>5</sup>

Malnutrition and decay in health infrastructure and services create a vicious cycle. Lowered immunity from inadequate nutrition likely contributes to the high prevalence of tuberculosis, which affects at least five percent of the population; TB and other infectious diseases such as hepatitis, which are a product of a decline in sanitation from degraded infrastructure, go untreated because of the lack of needed drugs; disease raises the likelihood of starvation among people who are food insecure. To survive, many North Koreans forage wild food such as roots and grasses, which lack protein, fat, and micronutrients,<sup>6</sup> and lead to infection with parasites, as evident in 29 percent of defectors arriving in South Korea in 2008.<sup>7</sup>

These trends are reflected in the population health indicators. Infant mortality in DPRK is 42 per 10,000 people. The mortality rate of children under the age of five years is 55 per 10,000 people.<sup>8</sup> The maternal mortality ratio doubled in DPRK during the 1990s. The toll of both acute and chronic malnutrition extends across generations, through inadequate fetal growth during pregnancy, low birth-weight babies, decreased immunity of children to disease, and potential decrease in cognitive functioning.

A significant proportion of the North Korean population, especially those in the more barren and isolated north, may be chronically sick. A 2004 survey conducted by the Center for Refugee and Disaster Assistance of 272 recently-arrived migrants in China who mostly came from the North Hamgyong Province near the border, revealed that almost 80 percent of the households had experienced an illness in the past two weeks. About 90 percent of respondents reported that a member of the household had been hospitalized within the past year.

## Famine, Emigration, and Markets

Throughout the 1980s, migration from North Korea to China was rare. The famine of the 1990s, however, drove a wave of migrants to China (a small percentage of whom went on to South Korea) despite severe restrictions on internal travel, draconian penalties for crossing the border, and the arrest and deportation of migrants by China. Emigration peaked in 1998, shortly after the most acute famine. It is difficult to establish the number of North Korean migrants currently living in China since many live in hiding because of the fear of arrest and forcible repatriation, but the State Department estimates the number to be between 30,000 and 50,000. In the past decade, migration has decreased as a result of increased border control and knowledge within North Korea of the harsh treatment of migrants by China. Many North Koreans have nevertheless remained in China, often moving away from the border provinces to northeast China, and many North Korean women marry Chinese men. The number of children born to North Korean women living in China grew to more than 10,500 in 2009.

The famine and migration of the 1990s stimulated the emergence of informal markets for Chinese goods and food, especially in northern North Korea. These markets were dominated by women, who were less tied to formal jobs than men. The markets generated income for vendors and traders, and made grains, fruits, and vegetables available to those who could find the money to pay for them. Families with defector relatives in South Korea benefited from remittances that were sometimes invested in informal market activities. For years, the government tacitly tolerated these markets and local officials accepted bribes to keep them functioning. But in November 2009 the government redenominated its currency, wiping out savings generated by the markets and repressing private economic activity. It shut down the markets and prohibited growing of crops privately for sale. The social unrest that followed led the government to reverse its decision and allow the markets to re-open, albeit under severe restrictions. Though still very localized, the markets provided a vehicle for modest economic development and limited access to food products.

## Humanitarian Response and Nascent Efforts to Develop the Health System

During the famine and subsequently, DPRK severely limited acceptance of humanitarian aid by denying need, restricting travel of aid groups, preventing transparent assessments of needs and distribution, and prohibiting NGOs from employing local staff or coordinating their efforts. Although some of these restrictions have since eased at the insistence of the World Food Program and other donors, they resulted in the departure of many aid groups. The few that remained

reached agreements with the government that limited needs assessments and accounting for aid dispersed. Today, food aid reaches only about 30 percent of the people in need.

Until recently, the only significant international donor support for health services or health system development came from the GAVI's vaccination program. GAVI has recently expanded its initiative to address health management and service delivery to support vaccinations. In 2006, WHO and the Republic of Korea began providing planning assistance to the health system and in 2008, the Global Fund to Fight AIDS, Malaria, and Tuberculosis, in partnership with UNICEF, WHO, and other NGOs, provided health system strengthening grants, mostly for TB programs. In an April 2010 visit, Dr. Margaret Chan, Director-General of the World Health Organization, lauded North Korea's engagement with international agencies on health system strengthening, maternal and child health, hospital and clinic renovation, and health worker training programs. There is reason for skepticism, however, whether resources and technical assistance can actually strengthen a health system in which government continues its highly centralized control, disallows free discussion and critical analysis, and restricts travel. Moreover, as one panelist put it, the Ministry of Health resists change, accepting things but not ideas. Should the Democratic People's Republic of Korea reunify with the Republic of Korea, the vastly different systems, infrastructure, organization, effectiveness, and workforce capacity will present different but still major challenges.

## Recommendations

The government of DPRK needs to place priority on increasing food production, restoring environmental integrity and sanitation, and overhauling the design, infrastructure, training, management capacity, and organization of the health system. It needs to assure the availability of medication, end corruption in their distribution, retrain health workers, rebuild the health infrastructure, and decentralize the health system. The chronic effects of malnutrition must be addressed. Current international initiatives to strengthen the Ministry of Health may have some impact on the margins, but without middle managers who are able to take risks, political space available for open discussion, and decentralization, current efforts at strengthening the health system are unlikely to improve the health of North Koreans. In the short and medium term, an increased delivery of food and medicine by the international community to DPRK and transparency in its distribution is essential.

China has a significant role to play both in respecting the human rights of migrants and in encouraging informal markets that can expand economic activity and, thereby, health in North Korea. It should regularize the status of North Korean migrants and their children, cease arrest and harassment of migrants, and provide identity documents to North Korean children born in China.

## Endnotes

1. Congressional Research Service, Country Profile, North Korea, 2007.
2. World Food Programme, "North Korea Faces Serious Cereal Deficit, Food Shortages and Undernourishment to Continue," November 17, 2010, <http://www.wfp.org/news/news-release/north-korea-faces-serious-cereal-deficit-food-shortages-and-undernourishment-conti>.
3. UNICEF, "Tracking Progress on Child and Maternal Nutrition: A Survival and Development Priority," November (2009): 11–104, [http://www.unicef.org/publications/files/Tracking\\_Progress\\_on\\_Child\\_and\\_Maternal\\_Nutrition\\_EN\\_110309.pdf](http://www.unicef.org/publications/files/Tracking_Progress_on_Child_and_Maternal_Nutrition_EN_110309.pdf).
4. World Health Organization, World Health Statistics, 2009, [http://www.who.int/whosis/whostat/EN\\_WHS09\\_Table7.pdf](http://www.who.int/whosis/whostat/EN_WHS09_Table7.pdf).

## ABOUT THIS BRIEF

The impact of economic collapse in the Democratic Republic of North Korea during the 1990s continues to devastate the health and lives of people in North Korea. This Peace Brief explores the current health status of North Korea, initiatives to strengthen the health system, the potential impact of migration and informal markets on health, and prospects for the future health of the population.

5. J. Grundy and R. Moodie, "An Approach to Health System Strengthening in the Democratic Peoples Republic of Korea," *International Journal of Health Planning and Management* 24 (2008): 113–29.
6. UN Food and Agricultural Organization/World Food Program, "Special Report: FAO/WFP Crop and Food Security Assessment Mission to the Democratic People's Republic of Korea," December 2008.
7. Amnesty International, "The Crumbling State of Health Care in North Korea," 2010, <http://www.amnesty.org/en/library/asset/ASA24/001/2010/en/13a097fc-4bda-4119-aae5-73e0dd446193/asa240012010en.pdf>.
8. For comparison, both of these figures are 5 per 10,000 in the neighboring Republic of Korea.



**UNITED STATES  
INSTITUTE OF PEACE**

1200 17th Street NW  
Washington, DC 20036  
202.457.1700

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