

Public Health

Reducing illness, saving lives

Health problems flow freely across borders — knowledge and solutions should too. For more than four decades, IDRC has supported research across the developing world that has saved lives and reduced illness by tackling threats to public health such as infectious diseases, tobacco, dilapidated health systems, and degraded environments.

Tanzania's healthcare breakthrough

In the early 1990s, Tanzania's health system was in dire straits. "There was a shortage of drugs and of the tools needed to deliver services. Facilities were dilapidated and health care was not properly planned," recalls Hassan Mshinda, the director general of the Tanzania Commission for Science and Technology.

But thanks to the Tanzania Essential Health Interventions Project (TEHIP), a collaboration between IDRC, the Tanzanian health ministry, and the Canadian International Development Agency, Tanzania underwent a remarkable healthcare renaissance. Child mortality was reduced by an astonishing 40% over five years in two test districts in the late 1990s with a simple top-up of 80 cents per capita to health budgets.

Strategic investments

The project proposed that small but strategic investments in health infrastructure could save lives.

Tanzanian and Canadian researchers began work on several fronts. An easy-to-use computer tool was developed to collect



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Strategic investments in health budgets reduced child mortality by 40% in Tanzania in the 1990s.

information on the major causes of death and disease. This simple program enabled health workers in both districts to direct more money toward combating the diseases that killed the most people.

A model for success

The effects have been dramatic. According to Honorati Masanja of Tanzania's Ifakara Health Research and Development Centre, as many as 280,000 fewer Tanzanian children died between 1999 and 2005 than would have been expected to die in the early 1990s.

That such gains could be made with such a small investment "was a huge surprise to everyone. Nobody believed this could actually happen," says Mshinda.

Since then, Tanzania has rolled out these health reforms nationwide. The result: dramatic improvements in health for children and adults throughout the entire country.

TEHIP's success has had a profound influence on African and global thinking about the importance of strong health systems. Burkina Faso, Ghana, Nigeria, and other African countries are now following the TEHIP model in reforming their health systems.



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Smoking tobacco through a hookah has many of the same risks as smoking cigarettes.

The health risks of tobacco and hookahs

The word is out: smoking tobacco through a waterpipe — a narghile or hookah — is as dangerous, or more so than smoking cigarettes. So says the World Health Organization, in a 2005 advisory that noted “waterpipe smoking is associated with many of the same risks as cigarette smoking and may in fact involve some unique health risks.”

The advisory resulted largely from the pioneering work of researchers at the American University of Beirut (AUB), supported by IDRC. Using a mechanical smoking machine, they demonstrated that one session at the waterpipe is as

dangerous as smoking 20 to 30 cigarettes. Smoke from waterpipes “has a tar content that is very high, nicotine, and heavy metals as well,” reports AUB researcher Rima Affifi. She says documenting the narghile’s dangers has allowed for a broader challenge of Lebanon’s pro-tobacco environment.

This is just part of IDRC’s global work on tobacco control, which includes helping countries with legislation and enabling farmers to plant alternative crops. Tobacco causes 5 million annual deaths, and 70% of smokers live in developing countries.



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Mexico’s approach to malaria control is the gold standard across Latin America.

A safer way to fight malaria in Mexico

Malaria cases in Mexico have dramatically declined — from a record high of 25,023 in 1998 to 4,895 in 2001, and 1,985 in 2008. And they have done so without the use of DDT. Mexico was committed to phasing out DDT by 2002 under the North American Free Trade Agreement.

The 1998 major outbreak in Oaxaca sparked a new approach in the fight against the disease. Since then, the number of cases has declined annually, with no malaria-related deaths recorded between 2000 and 2007. Mexico’s approach has become the gold standard for malaria

control across Latin America, inspiring highly successful campaigns from Central America to Ecuador.

The key is working together. Scientists pinpoint sources of malaria; communities destroy mosquito breeding grounds, such as algae in rivers, and spray homes with a safer pesticide. New ways of tracking malaria also allow for quick action before an outbreak becomes an epidemic.

“We have given communities the means to take care of themselves,” explains lead researcher Dr Mario Henry Rodriguez.



MICRONUTRIENT INITIATIVE

M. G. Venkantesh Mannar, President of the Micronutrient Initiative.

Micronutrients reduce maternal and child illness and death

Vitamin and mineral deficiencies affect a third of the world’s population, preventing them from fulfilling their potential. In 1992, IDRC and others funded the Micronutrient Initiative. Its mission: Make sure the world’s most vulnerable people get the vitamins and minerals they need to survive — and thrive.

MI President M.G. Venkantesh Mannar recalls that in the 1990s, iodine deficiency

was widespread across developing countries. “Less than 20% of the world had access to iodized salt.”

Since then, MI has grown into the leading global agency focused on developing and delivering low-cost and effective solutions for vitamin and nutrient deficiencies in the world’s most vulnerable populations, particularly women and children.

About Canada’s International Development Research Centre

IDRC supports research in developing countries to promote growth and development. IDRC also encourages sharing this knowledge with policymakers, other researchers, and communities around the world. The result is innovative, lasting local solutions that aim to bring choice and change to those who need it most.

Read more about the lasting impacts of IDRC-funded research @ www.idrc.ca/lastingimpacts.

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