

**INTEGRATED MALARIA VECTOR MANAGEMENT
THE SYSTEMATIC & LOGICAL APPROACH
TO CURB THE DEVASTATION OF MALARIA**





Prime Minister Stephen Harper announces significant Canadian contribution to Global Fund to fight Aids, Tuberculosis and Malaria.

Malaria: Canada is to mobilize researchers to combat disease. Canada has decided to spend 225million Canadian dollars ... to encourage innovation to combat health problems. "Grand Challenges Canada" to fund researchers and organizations.

Minister of Finance Jim Flaherty

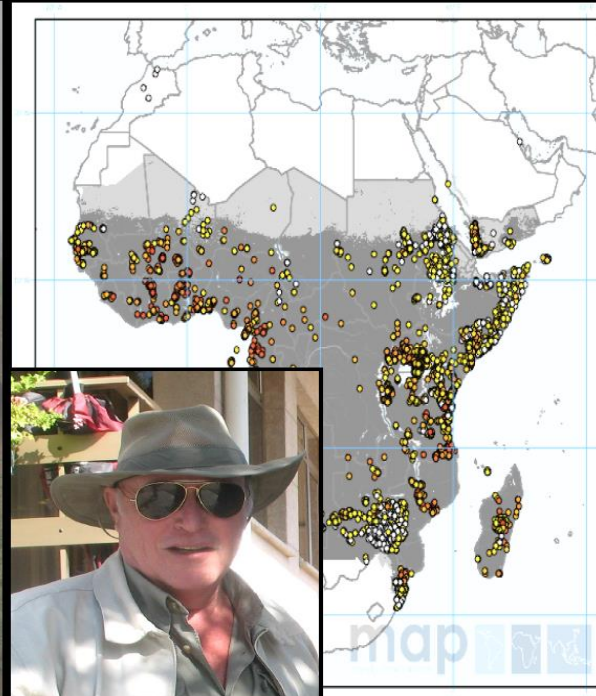
Individual Canadians and Canada have improved the human condition around the world—often quietly and in an unassuming manner and with non-traditional and innovative methods. Dr. Norman Bethune and Dr. Frederick Banting come to mind. Such men have reflected well on Canada.

Dr. Barry Tyler is a unique Canadian with skill and experience to support his commitment to significantly curb the devastation of malaria. Current approaches are insufficient.

Dr. Tyler proposes the establishment of Centres of Excellence to transfer Canadian vector control technology, train and employ locals to implement successful grass roots Integrated Malaria Vector Management programs.

Individuals can make a difference!

Funding is required to continue.



Mission Statement

To improve the human condition by the transfer of malaria mosquito control technologies and the implementation of fully Integrated Malaria Vector Management (IMVM) strategies including and not to the exclusion of current management tactics.

Barry Tyler, Ph.D.
President



Goal

To establish Centres of Excellence in each country where malaria is endemic to train local people to implement their own IMVM operational programs. This will create employment, significantly reduce malaria vectors, and reduce the impact of malaria including the levels of infant and pregnant women fatalities at the community level, the burden on health systems and the devastation of personal loss to families.

Barry Tyler, Ph.D.
President



CURRENT MALARIA CONTROL INITIATIVES

Current initiatives include the UN Global Malaria Action Plan, the President's Malaria Initiative, the Bill and Melinda Gates Foundation, The Belinda Stronach Foundation, Spread the Net and Malaria No More. These organizations are currently focused on four programs to achieve their goals:

- Indoor residual spraying ["IRS"]
- Insecticide treated nets and long-lasting insecticidal nets ["ITN and LLITN"]
- Preventive treatments for pregnant women & children under 5 years
- Treatment of infected persons

UPDATE

Global funding for malaria increased from \$0.733 billion in 2006 to \$1.94 billion in 2009. Approximately 289 million insecticide treated bed nets were delivered to Sub-Saharan Africa by the end of 2010. New strategies for prophylactic medications and treatment of malaria cases have increased. Indoor residual spraying has had limited acceptance but appears to be on the increase.

We now have an opportunity, to look back and review the fruits of our labour. The 2010 World Malaria Report asserts that the number of deaths due to malaria is estimated to have decreased from 985,000 in 2000 to 781,000 in 2009.

Most malaria cases occur in sub-Sahara Africa:

- Young children die at a rate of 1 every 45 seconds; survivors have a high probability of contracting cerebral malaria that affects their abilities throughout their lives;
- In young non-immune pregnant women, malaria causes up to 60% miscarriages and 10-50% maternal death rates;
- 200,000 infants die as a result of malaria infection during pregnancy.

After all that effort, the numbers only translate to a 21% reduction in mortality.

These programs are important but they will not eradicate malaria globally by 2015 or reduce the death rates and health costs to the lowest social and medical levels.

THE LIMITED SUCCESS IS A REFLECTION OF THE COMPLEXITY OF THE MALARIA PROBLEM

AND

**OUR INABILITY TO EFFECTIVELY COME TO TERMS WITH THAT PROBLEM
USING OUR CURRENT APPROACH**

WE CAN CERTAINLY IMPROVE ON THE RESULTS OF THE CURRENT EFFORTS!

significantly and cost effectively

The solution ... **Malaria Vector Free Zones at the Community Level** ...
achieved by the application of the FULL arsenal of tools of

Integrated Malaria Vector Management.

In the 21st century, mosquito borne diseases like malaria, dengue, yellow fever and West Nile virus are not major killers in developed countries in North America, Central America and Europe where they were endemic. This is because disease control programs in these parts of the world use Integrated Disease Vector Management.

Definition: Integrated Disease Vector Management is a decision making process that takes into account larval habitat surveillance and mosquito monitoring data and consideration and application of a combination of environmentally appropriate and effective control methods to reduce a vector population in a given geographic area.

Indeed the control methods could involve the use of modern larvicides, adulticides and application technology which are deemed much more environmentally acceptable than the older materials and application techniques of 30 years ago. Control methods may include removal of artificial larval habitats such as discarded water bottles and tires as well as drainage of standing water areas. Integrated Disease Vector Management involves the use of all applicable tools and technology and therefore would not exclude the use of bed nets and indoor residual sprays.

The key to the success of these Integrated Disease Vector Management programs is the significant reduction of the mosquito vector population before the mosquitoes bite and transmit disease.

**Africans are suffering. They are also well informed. Those that I have met are asking,
“Why not vector control?”
I would ask,**

“Why not Integrated Malaria Vector Management?”

**INTEGRATED MALARIA VECTOR MANAGEMENT
PROVEN EFFECTIVE**

**SUCCESSFUL OPERATIONAL PROGRAMS
&
FIELD STUDIES**

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