As HIV/AIDS gains new (and deserved) attention and funds, it will be ironic if Western
governments overlook another accelerating epidemic that has killed and disabled even more
people in the past 20 years. It is malaria.

Many in the developed world dismiss malaria as an ancient, largely vanquished affliction. But
its parasites have mutated into forms ever more resistant to the commonly available drugs. In
much of sub-Saharan Africa, malaria deaths have doubled in the past decade; globally, the
annual death rate is well over 1 million.

Down this path looms catastrophe of epochal proportions. But that tragic result is readily
avoidable, using proven strategies that are certain, simple and cheap -- compared, for
example, with the complex technological, behavioral and social breakthroughs necessary to
defeat HIV/AIDS. As Bill Gates observed, "It is unacceptable that 3,000 African children die
every day from a largely preventable and treatable disease."

The basic need is straightforward: to replenish the research-and-development pipeline for
new antimalarial medicines. Upgrading preventive techniques by, for example, scrapping
misplaced taboos to allow internal spraying of African homes with DDT is essential. But
without a continuous stream of new, effective and affordable drugs, no anti-malaria strategy
will work.

While the malaria parasite was making a quiet comeback beginning in the late 1970s, the
malaria R&D pipeline went dry. As the Defense Department's Walter Reed Army Institute of
Research observed last year, "it makes little commercial sense to turn out costly
pharmaceuticals for people who can't afford shoes." Industry's exit has prevented malaria
research from exploiting recent publicly funded discoveries such as the genomic sequences
of malaria parasites.

Today, six years after the World Health Organization committed to cut the number of malaria
deaths in half by 2010, the number of malaria victims continues to grow. Western countries
have fallen far short of pledges to fund the WHO's "Roll Back Malaria" campaign. Along with
the Global Fund to Fight AIDS, Tuberculosis and Malaria, and the World Bank, the WHO itself
has been charged (by experts from the Royal Institute of International Affairs in London and
the American Enterprise Institute in Washington) with squandering what funds it has on
useless drugs and with committing "medical malpractice" in funding sub-Saharan
governments' purchase of standard medicines that are cheap but increasingly ineffective. (In
response, the Global Fund on June 30 committed an extra $90 million to fund new
combination treatments.) The underlying problem, not highlighted in these attacks, is the lack
of effective and affordable alternatives. The expert critics tout newer combination drugs
containing extracts from the Artemisia annua plant. But these artemisinins, only one of which
yet meets international quality standards, are neither easy to scale nor cheap to produce.
While they offer the best available treatment, artemisinins are only a partial, interim solution.

Recent collaboration by the WHO, World Bank, foundations and industry representatives has
produced innovative institutional mechanisms that show great promise for restocking the
malaria medicine cabinet. Structured as public-private partnerships, these entities are in effect
nonprofit virtual drug companies configured to discover and develop drugs and vaccines for
neglected diseases. Two of these hybrids, Medicines for Malaria Venture (MMV) and Malaria
Vaccine Initiative, focus on malaria. MMV's 21 drug development projects make up the largest
malaria drug R&D portfolio in history.
The projects vary from quick-to-market reformulations of existing adult drugs to treat small children to wholly new synthetic compounds as effective as artemisinins at a fraction of the cost. Project teams from 42 universities and government and pharmaceutical laboratories work with business-style criteria, to fit the needs of their target Third World consumers.

But malaria research worldwide remains chronically underfunded -- around $100 million annually, or 20 cents for each malaria infection. In contrast, ailments common in developed countries, such as heart disease, generate hundreds of R&D dollars per case. Just one dollar for each of the 300 million to 500 million annual malaria infections would be enormously productive as well as appropriate.

Hopeful signs have recently appeared. In September the Bill & Melinda Gates Foundation announced a $168 million, five-year malaria drug and vaccine grant package. Four big pharmaceutical companies -- GlaxoSmithKline, Sanofi, Pfizer and Novartis -- each recently launched malaria-related research projects. In February Congress increased USAID antimalarial funding by more than 50 percent, from $65 million to $101.5 million, and directed 10 percent of the total -- $10 million -- to research for new antimalarial drugs and vaccines. While small in absolute terms, these are promising first steps.

The first cure for malaria, introduced in the 1600s, was a bark extract found to contain the (once) powerful antimalarial quinine. Four hundred years later, the best medicine on the shelf is another plant extract, artemisinin. But in the 21st century, we need not rely on plants to cure malaria, any more than we now rely on them to cure headaches.

The writer is president of the Burroughs Wellcome Fund, a private foundation promoting medical research, and a member of governing and advisory boards of numerous organizations engaged in research and development on remedies for chronic infectious diseases.