

[« To the front](#)

Kakamega is among the regions with the highest malaria infection rates in Kenya. The East African country is one of three in Africa

[view more](#)

## Malaria: Can a new but expensive vaccine stave off the infectious disease?

For 35 years, researchers have been working to develop an effective malaria vaccine. Now they are beginning to approach the goal.

By Jacob Kushner (text) and Lena Mucha (photo), in Kenya    Last updated: 28.08.2020 11.28.30



When the world marked World Malaria Day on 25 April this year, it was also celebrated that [275,000 children had received the new vaccine.](#)

Malaria is a disease that has hit poor countries hard for many years. Over [200 million people are infected annually](#) and about 400,000 die. Over 90 percent of malaria cases and deaths are in Africa. It is young children who most often have to pay with their lives.

Tens of thousands of African health workers are involved every day in the fight against the disease, in hospitals, health centers and in the villages. The experienced Kenyan

nurse Janet Mula is among those who work to prevent and treat. She also remembers how widespread the disease was a few decades ago.



Vaccination at the district hospital in Kakamega. Here, the malaria vaccine is offered to all children

[view more](#)

- Malaria took many of the children's lives, the nurse recalls. She grew up in western Kenya in the 1970s and '80s. Mosquito nets were not common at that time and in the village it was not known at the time that mosquitoes were carriers of the disease.

The nurse talks about the complications that affect patients, especially for the youngest children, when they have contracted malaria. - Anemia, organ failure, jaundice and liver problems. The parasites break down the blood cells very quickly, when they are in the body, she says.

The first time Mula heard that a potential malaria vaccine was on the way was over a decade ago.

- We longed for it to come, says Mula who can now state that the national work against malaria has come one step further. Kenya was one of three countries selected to participate in the trial. Ghana and Malawi are the other two. The trial has now been going on for about a year.

## Hit the least

- The vaccine is especially intended for young African children. They are the ones who suffer the most from malaria, says Eliane Furrer, who works with the malaria vaccine for the World Health Organization (WHO).

And Kenyan health authorities welcome the vaccine. In some places in western Kenya, the incidence of malaria is very high.



Aleksina Kasiti (16) sleeps under a mosquito net she shares with her grandmother. The household [view more](#)

But the new malaria vaccine does not guarantee the development of the disease. It only manages to reduce the number of malaria cases by 40 percent among those who get it and reduces only about 30 percent of the serious cases. (1)

There are many other measures against malaria that also have a good effect, and some experts are concerned that the new vaccine is not worth the expense.

## More expensive than mosquito nets

[A study](#) estimates that the vaccine will cost 87 US dollars (about 800 kroner) per Disability Adjusted Lifeyear. That is, for every healthy year one misses as a result of disability, ill health or premature death.

In comparison, the distribution of several mosquito nets will cost an average of 27 US dollars, the researchers estimate. This means that you have almost three times as much to deal with, if you spend the money on mosquito nets instead of vaccines.

And that does not take into account the billions of dollars that researchers and pharmaceutical companies have spent over the past 35 years developing the new malaria vaccine. (RTS, S vaccine). The Bill and Melinda Gates Foundation are among the health care providers who have spent hundreds of millions of dollars developing the vaccine that is now being tested.

Among other things, they have collaborated with the pharmaceutical giant GSK. It is not known how much money this company has invested in the research, but there are very large sums.





Children's play in Kakamega County, Kenya. Children are at higher risk of developing malaria because they have less immunity.

✓ [view more](#)

## - Rather ACT medicine

There is now a continuous debate among malaria experts around the world about the effect of various measures. In Kenya, several health experts believe that the money would have been spent more effectively on mosquito nets and medical treatment of patients with Artemisinin Combination Therapies (ACTs). The drug ACT is cheap and is already used in the treatment of malaria.

**- \$ 3 billion is now spent on malaria every year, according to the WHO. And yet, with so much money, we can not get rid of the problem. We need to be able to reflect a little on why this is so, says Song Jianping, deputy director of the Institute of Tropical Medicine at Guangzhou University in China.**

He believes that this money should rather have been spent on ACT.

Others are more optimistic and believe that the new vaccine, despite its shortcomings, may be a first step towards eradicating malaria.





Research assistant Silas Agumba (35) and a team at the Kenya Medical Research Institute have a

[✓ view more](#)

Every morning at Malava Sub-County Hospital, little babies are waiting to be vaccinated. Meanwhile, their mothers - only one father is present - are learning how to prevent malaria at home.

- How many people use mosquito nets? Only half of the women raise their hands. When pregnant women come to the hospital for a health check, they get a free mosquito repellent net that they can have over the baby's bed.

But mosquito nets reduce child mortality by "only" 23 percent, according to calculations made by the WHO.

WHO adviser Eliane Furrer believes that mosquito nets must be combined with other methods. She says daily use of mosquito nets can be difficult to achieve. Especially where it is hot, not everyone can afford to spend the evenings under a mosquito net. - The advantages of the vaccine are that once the child has been vaccinated, he has the protection with him at all times, she says.

But vaccinating all children in populous western Kenya will not be an easy task. In Malava, about 27 percent of the population has the malaria parasite in their blood at all times.



[view more](#)

## Stopped

The world has made great strides in reducing and eradicating malaria. 22 countries were declared malaria-free between 1955 and 1987 and five managed to get rid of the disease between 2007 and 2014, according to the WHO. But after that it has stopped.

The WHO estimated that 21 more countries would be free of malaria by 2020 - six of them in Africa. But new figures show that around half of these countries "were not on schedule". All of these were African countries.



Insecticide-treated mosquito nets are part of the interventions to reduce malaria infections. But many

[view more](#)

- The value of vaccination is greater than the number of people vaccinated against malaria. You bring people into contact with the health system, says WHO expert and epidemiologist Kate O'Brien.

But this "play-over" effect is controversial. None of the women, who were interviewed in connection with this article, made more contact with the health service due to the malaria vaccine. And some even got the wrong impression of the vaccine. - The vaccine prevents all cases - so she will not get malaria, said a mother about her little daughter, while the experts behind the vaccine themselves believe that the vaccine only prevents up to 40 percent of cases.

## The world's most successful initiative

O'Brien points out that vaccines have generally been the most successful health intervention program in history. - All countries in the world now have vaccination



programs for all children in the country.

Just a few decades ago, close to 10 million children died of causes that could have been avoided, of which 95 percent in developing countries, says director Anuradha Gupta of the vaccine alliance GAVI.

Today, this number has dropped to 1.5 million. But the job is not done. There are still 10 million children - often from marginalized groups - who do not receive vaccines at all.




Malaria is an infectious disease transmitted by mosquito bites, and is widespread in large parts of the tropical world, but Africa

[view more](#)

- **Glossary:** [Health loss-adjusted life year](#) (also called "disability-adjusted life year") is a measure of the total disease burden, expressed as the number of years lost due to poor health, disability or premature death. It was developed in the 1990s as a way to compare the general health and life expectancy in different countries. Source: Wikipedia

*This reporting was supported by a Global Health Reporting Grant from the [European Journalism Center](#).*



«Medisin mot livstruende navlebesking»  
Marta Tveit, Afrika-aktivist i Fellesrådet.

Prøv vårt NYHETS BREV!

**BISTANDS**AKTUELT

[To the top of the page](#)

Published: 28.08.2020 11.28.30

Last updated: 28.08.2020 11.28.30

[Health](#)[Progress](#)[Education and research](#)[Africa](#)[Ghana](#)[Kenya](#)[Malawi](#)

---

[✓ The editorial staff](#)

---

[✓ Contact](#)

---

[✓ Address](#)

---

[Privacy statement](#)[Subscribe to newsletter](#)[Order the hard copy - Free!](#)[RSS](#)[Employees](#)[Tip us! News about names](#)[Online and paper ads](#)