

PATH Today

A Newsletter for Friends and Supporters

Winter 2010

Promising protection for millions

Each year in sub-Saharan Africa, mothers cling to the “rains of hope” to bring a respite from a deadly disease. The rains mark the end of a seasonal and powerful threat: epidemic meningitis. For more than a century, meningitis has swept through the region on dry, dusty winds, killing one in ten people who become infected and leaving one-quarter of survivors deaf or severely debilitated.

Vaccine reaches Africa!
More inside

WHO/Burkina Faso



Twenty million people in Burkina Faso, Mali, and Niger are receiving the new meningitis vaccine this month as nationwide immunization campaigns begin.

But now, mothers will no longer have to fear the dry season. At the beginning of December, PATH and the World Health Organization launched a new vaccine that will protect from the region's specific strain of meningitis with a single dose.

The mass introduction of the new vaccine, called MenAfriVac™ (a meningitis vaccine for Africa), is one of the great global health milestones: the first time that people in Africa's meningitis belt will have a long-lasting solution for protection against the epidemic disease.

On December 6, Burkina Faso became the first country to introduce the vaccine nationally, followed by Mali and Niger. Over the course of just

a few weeks, 20 million people will receive the vaccine. In the next five years, given sufficient funding, the vaccine will reach 250 million people in 25 countries from Senegal to Ethiopia. The vaccine will remove the fear that families in the “meningitis belt” face each time the dry, dusty winds begin to blow. It offers a groundbreaking dose of hope for Africa, beginning now. ●

Follow the launch

To read dispatches from the field, see images from Africa, and learn more about the exciting launch of the new meningitis vaccine, visit our special web section at www.path.org/menafriovac/.

Creating a future free of meningitis

An affordable solution for Africa: How we did it

In 1996 and 1997, as the largest meningitis epidemic in African history swept across the meningitis belt, 25,000 people died and many more were sickened. For African health officials, it was the final straw. They turned to the global health community for a solution.

Heeding their plea, PATH and the World Health Organization (WHO) formed a partnership called the Meningitis Vaccine Project (MVP) with funding from the Bill & Melinda Gates Foundation. In 2001, we began developing a low-cost vaccine to offer long-lasting protection against the specific strain of meningitis most responsible for sub-Saharan Africa's deadly epidemics.

Less than 50 cents per dose

African health ministers, hopeful of the vaccine's potential, knew that it wouldn't be of any use to their countries unless the new vaccine cost less than \$0.50 per dose, a price they could afford.

Developing a vaccine with a major international manufacturer would be expensive, so the project team decided

to do something that had never been done before. "We essentially became a virtual vaccine company," says Dr. Marc LaForce, director of MVP.

But the team had no facility, intellectual property, or even the materials needed to make the vaccine. "We really had nothing," he says. "The challenge was to translate that nothingness to a product and prove that this product met all international standards.

"And I will confess that a lot of people said this was just foolishness, that this couldn't happen," LaForce continues. "But it did."

A complex path to success

PATH and WHO worked with the Serum Institute of India Ltd.—a developing-country vaccine manufacturer—to create the new vaccine. Under an innovative model, we acquired the raw materials from a Dutch biotech partner and the Serum Institute and the vaccine technology from the US Food and Drug Administration, and then transferred the technology to the Serum Institute.

The result is a vaccine developed at less than one-tenth the cost of vaccines developed by "big pharma"

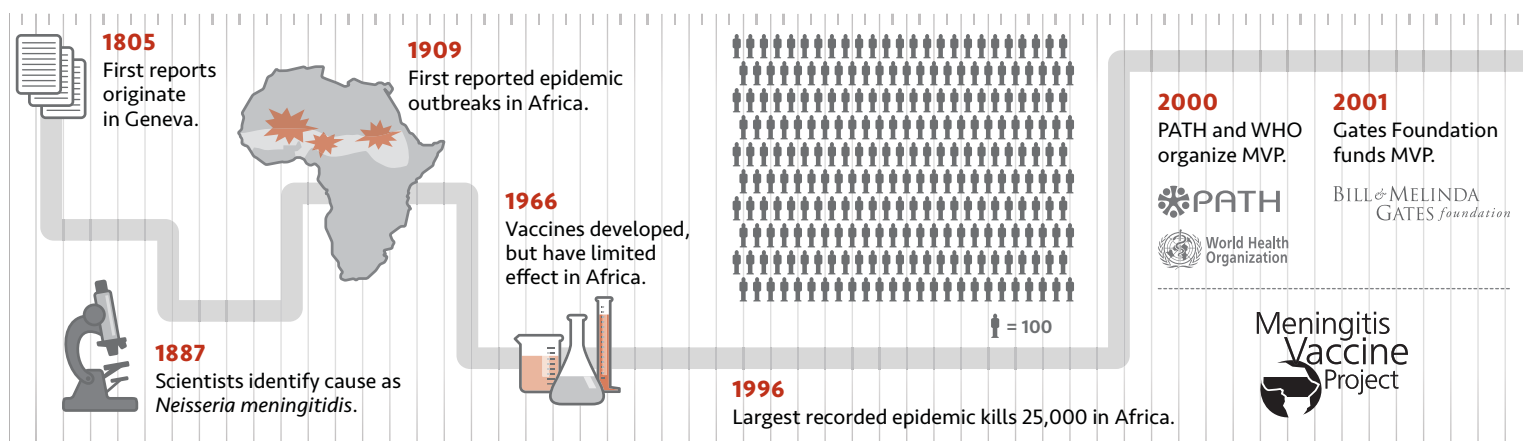
manufacturers. MenAfriVac™ has now started reaching people ages 1 to 29 years old, and in a few years we anticipate the vaccine will be approved for use in infants as well—paving the way for generations ahead in sub-Saharan Africa to live without fear of meningitis. ●

Meningitis at a glance

- Meningitis is an infection of the thin lining surrounding the brain and spinal cord.
- Almost all epidemics in Africa are caused by the bacterium *Neisseria meningitidis* group A.
- As many as 450 million people are at risk of meningitis A in the meningitis belt.
- Infections kill 10 percent of those sickened and leave one-fourth of survivors with hearing loss or other disabilities.
- Three-fourths of deaf children in sub-Saharan Africa are deaf because of meningitis.
- MenAfriVac™ is the first vaccine of its type developed specifically for Africa.

A timeline of meningitis in Africa

The new meningitis vaccine received the green light this year for large-scale use in the most vulnerable countries.



Life in the meningitis belt

"The last thing you sell when times are bad is the front door," says Dr. Marc LaForce, director of the Meningitis Vaccine Project. But in Burkina Faso, one of the countries hardest hit by meningitis, LaForce has seen families do just that.

Often carved or painted, the doors are unique and personal to every family. Homes without doors tell of the economic toll meningitis can have, especially in communities that are already struggling against poverty.

For one member of a family to be ill with meningitis costs the household \$90, including medicine, nursing care, transportation to health services, lost wages, and other related expenses. That's three to four months of savings for a family in Burkina Faso—an incredible burden for families that are already pressed to their limit.

One man's story



A young man named Jean-François, sickened with meningitis, has inspired Dr. Marc LaForce to forge ahead with the new vaccine. Watch LaForce tell the story of Jean-François at www.path.org/menafriovac/notes-countdown.php#1115.

It can take families years to work their way out of poverty. To pay for needed treatment, they sell their chickens, their cows, other possessions, and finally, their front doors.

"You only have to see that once or twice for such an event to make a terrible impact on you, to see how bad it really is," says LaForce. ●



The new meningitis vaccine means a family won't have to sacrifice everything to care for a sick child.

2002

Manufacturer in India chosen to make vaccine for Africa.

2003

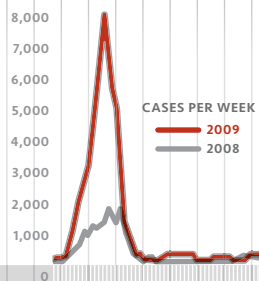
Preclinical studies begin.

2005

Clinical trials of vaccine that becomes MenAfriVac™ begin.

2007

Trial results suggest MenAfriVac™ is safe and effective.



2009

Meningitis epidemic wave in Africa confirmed: 4,243 deaths, 78,890 suspected cases.

2010

JUNE: WHO prequalifies MenAfriVac™.

SEPTEMBER: Small-scale vaccination begins.

DECEMBER: Countrywide vaccination begins in Burkina Faso, Mali, and Niger.

PATH'S MISSION

*is to improve
the health of people
around the world by
advancing technologies,
strengthening systems,
and encouraging
healthy behaviors.*



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Contact us

For information about upcoming events, contact events@path.org.

For questions about giving opportunities or other feedback, contact Jan Jacobs, director of Donor Relations, at jajacobs@path.org or 206.302.4565.

Gifts matched through December 31

Through the end of this year, in celebration of the launch of the new meningitis vaccine, all gifts to PATH will be matched dollar for dollar. Your impact will double through the 1+1 Challenge—a pledge from a group of people who feel passionately about the hope for health in poor countries and its potential for the future.

One child + one vaccine = hope for the future

The launch of a new meningitis vaccine is a milestone in global health, promising new hope for millions. But each dose of vaccine has an impact that is both much smaller and infinitely larger, bringing the promise

of a better life to people very much like you, one shot at a time.

Your support helps make milestones like this possible. With your help, we're able to test new ideas and push forward projects with the potential to impact millions of lives

One gift + your gift = twice the impact

We've named our year-end challenge after the impact people can have together. Thanks to a group of generous donors, the 1+1 Challenge will match all gifts to PATH's Catalyst Fund dollar for dollar, up to a total of \$135,000, through December 31.

A new vaccine for Africa is just one step toward a better world. We invite you to be part of the equation. ●



Through December 31, your gift will double through a dollar-for-dollar match.

Take the 1+1 Challenge

Donate now at www.path.org to have your gift matched. Consider making a gift in honor or memory of someone special, and we'll send a card to tell them you care.

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