



# Epidemic meningitis control

## A three-pronged strategy to eliminate epidemic meningitis as a public health problem

### → What is meningitis?

Meningitis disease is an infection of the meninges, the membrane covering the brain. Bacterial meningitis is very serious because its onset is rapid and the infection is associated with a significant risk of death; it may also result in mental retardation, deafness, epilepsy, etc. It can be treated with appropriate antibiotics that also prevents spread.

### → Meningitis epidemics and the “African Meningitis Belt”

A strip of land of Sub-Saharan Africa, extending from Senegal to Ethiopia is referred as the “African Meningitis Belt”, representing:

- 430 million people at risk in 26 African countries.
- Recurring epidemics causing 20,000 to 200,000 cases and 2,000 to 20,000 deaths annually.
- Before 2010, 80% of the African Belt epidemics were caused by the meningococcus of serogroup A.

### → Programme goal

The goal is to eliminate epidemic meningitis as a public health problem through:

- preparedness, early detection and effective response to outbreaks;
- protection of individuals at risk through vaccination;
- collection, dissemination and use of key information through surveillance;
- coordination of ongoing control and research efforts.

### → The Men A conjugate vaccine: a successful prevention tool

In 2010, a new safe and affordable conjugate vaccine was introduced to protect against meningococcus A. The introduction strategy is two-pronged:

- mass campaigns to gain immediate benefits on a public health level, and
- the integration of the vaccine into routine childhood vaccination (2015 onwards).

## → 5 strategic axes

## Major achievements

### 1. Strengthening outbreak preparedness, detection and response

*So that...* prompt and appropriate antibiotic treatment can be offered and suitable vaccines can be selected for an timely response.

- 18 countries report weekly on number of cases and deaths at district level.
- Wide dissemination of weekly meningitis surveillance bulletins to key stakeholders during the epidemic season.
- Operational thresholds established to trigger response actions.
- Laboratory supplies pre-positioned in the field before the epidemic season so that outbreaks are quickly confirmed.

### 2. Implement case-based surveillance

*So that...* epidemiological and laboratory information on every single case is linked and used to evaluate and adapt the control strategies.

- A network to collect, collate and analyse information is coordinated by WHO's inter-country support team in Ouagadougou.
- Measuring the impact of Men A vaccine introduction.
- Monitoring changes of meningitis strains circulating in the Belt.

### 3. Preventing Men A disease through vaccination

*So that...* millions of vulnerable people can be protected from disease and no longer carry the bacteria hence stopping transmission.

- 215 million people from 15 high-risk countries protected with the Men A conjugate vaccine through mass campaigns.
- Risk assessment tool developed to determine priority areas and to define optimal vaccination strategies.

### 4. Developing a forum for global collaboration

*So that...* worldwide meningitis control efforts are coordinated and harnessed for the greatest public health good of all affected countries.

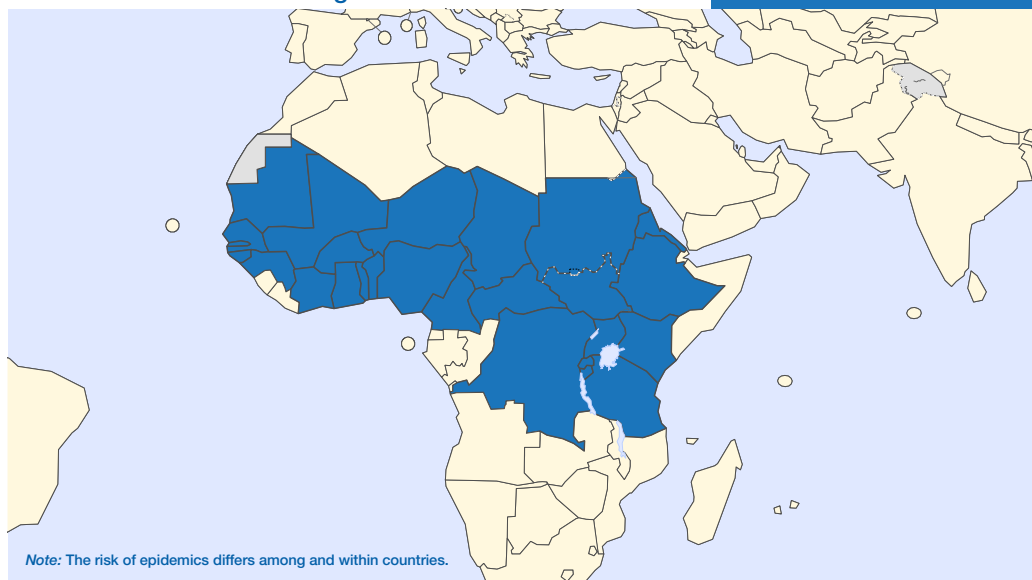
- Establishment of the International Coordinating Group, a multi-agency partnership managing an emergency vaccine stockpile and ensuring its equitable distribution.

### 5. Stimulating research and innovative tools

*So that...* the best up-to-date technologies, tools, and guidance are made available to affected countries.

- Support the development of rapid diagnostic tests.
- Forecast the weekly occurrence of outbreaks through climatological and epidemiological data.

#### The extended African Meningitis Belt: 26 countries



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#### More information is available on the WHO website:

<http://www.who.int/csr/disease/meningococcal>

The department of **Pandemic and Epidemic Diseases (PED)** develops strategies, initiatives, and mechanisms to address priority emerging and re-emerging epidemic diseases, including outbreaks, thereby reducing their impact on affected populations and limiting their international spread.

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