



What is Meningitis?

Meningitis is an infection of the meninges, a thin lining that surrounds the brain and spinal cord. Meningococcal meningitis, which is caused by bacterium *Neisseria meningitidis*, poses a major threat to Sub-Saharan Africa.

Symptoms and signs:

severe headache, high fever, chills, vomiting, nausea, photophobia, stiff neck, psychological disorders, comma

Complications:

Over 50% of mortality without treatment and between 5-10% within 24-48 hours after onset even with appropriate care
Long term neurologic sequelae such as deafness, hemiplesia, or mental retardation

Niger and Meningococcal meningitis

High incidence, mortality & morbidity rates
13,440 were infected and 564 died in Niger during 2009 epidemic alone.

80-85% of cases are caused by serogroup A
Infection through respiratory droplets.

Attacks mainly children and young adults.

Epidemics during dry season (Jan.-May)

Droplets can be spread more easily in hot and dry weather.

Huge health and economic burden

Each case is estimated to cost US\$90, one third of family's annual income.

How to Control?

Traditionally, reactive vaccination with polysaccharide vaccines against group A meningococcus was conducted.

Now, preventive vaccination campaign with new conjugate vaccine against type A meningococcus became possible.

Polysaccharide Vaccine

- effective for only 2~3 years
- cannot protect children under 2 years old
- cannot induce herd immunity
- US \$1.05 per dose (UNICEF price)

Conjugate Vaccine

- effective for 10 years
- can protect children younger than 2 years old including infants
- can induce herd immunity
- US \$0.40 per dose (MenAfriVac™ from Serum Institute of India)

More effective Conjugate Vaccine is now available since 2010!

Project Summary

Target area & population:

The regions of Tillaberi and Maradi, affects nearly 6 million.

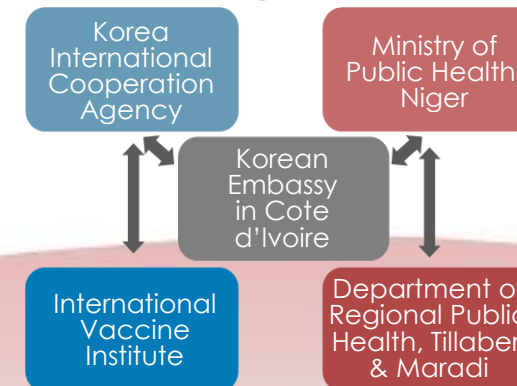


Duration: 2 years (2009-2011)

Objectives

1. Reduction of morbidity and mortality caused by epidemic meningitis
2. Capacity building in terms of disease surveillance and response against epidemic meningitis

Operational organization



Project components

1 Provide vaccines against group A meningococcus

2 Support epidemic investigation

3 Support vaccination campaigns to control meningitis

4 Monitor and evaluate vaccination campaigns

5 Provide diagnostic equipments for meningitis

6 Strengthen cold chain capacity

7 Strengthen waste management capacity

8 Organize training workshop for health care workers

Future perspective

- > Evaluation of the impact of the new conjugate vaccine introduction, including assessment of vaccine effectiveness
- > Strengthening case-based meningitis surveillance, before and after introduction of the new conjugate vaccine



Air-ticket Solidarity Levy Global Poverty Eradication Contribution

In September 2007, the Korean government introduced an air-ticket solidarity levy entitled "Global Poverty Eradication Contribution," a measure through which 1,000 KRW (\$0.89) is collected from each international flight passenger departing from Korea in order to eradicate poverty and disease in the world's least developed countries.

Seeks to:

- > Support the control of HIV/AIDS, tuberculosis, and malaria in developing countries by UNITAID.
- > Support disease eradication projects in Africa by Korean NGOs.
- > Support disease eradication projects in Africa requested by the African government.

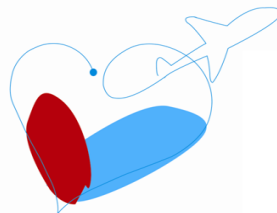


LOVE FOR NIGER!



Contact

Project Management Consulting:
Meningitis Program, International Vaccine Institute
SNU Research Park, San 4-8, Nakseongdae-dong, Gwanak-gu, Seoul 151-919 Republic of Korea



Website:

www.men-niger.org

E-mail:

info@men-niger.org

Strengthening
Epidemiologic Surveillance
and Response Against
Meningitis in Niger

