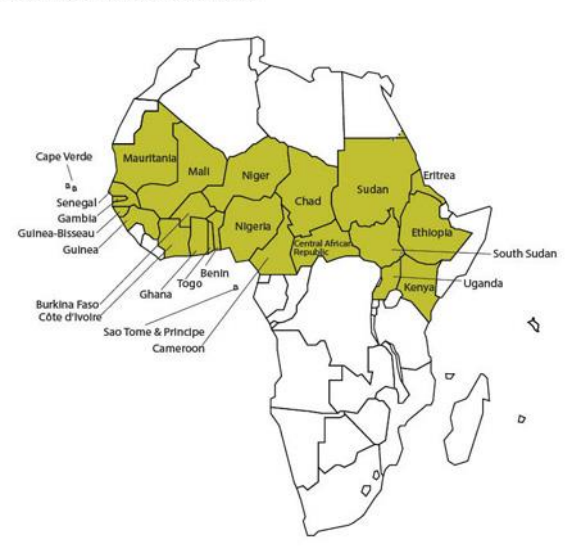


Overview of Meningitis Outbreak in West Africa -01 January to 06 April 2017

BACKGROUND

Figure 1. The meningitis belt in the African Region



- Most of West Africa falls within the World Health Organisation's extended meningitis belt stretching from Senegal to Ethiopia
- Epidemics occur annually between late November and June in the African belt and constitutes a major health threat.
- Five types of meningitis exist- bacterial, viral, parasitic, fungal, and non-infectious with bacterial being the most dangerous
- Meningococcal Meningitis caused by the *Neisseria meningitides bacteria* is most common in West Africa
- Affects the thin lining surrounding the brain and spinal cord and can cause severe brain damage
- Symptoms include fever, neck pain and stiffness, convulsion, confusion and vomiting
- Spreads from person to person via respiratory droplets and fatal in 50% of cases if untreated.
- 12 serogroups of *Neisseria meningitides* have been identified, 6 of which (A, B, C, W, X and Y) can cause epidemics.
- Cases of meningitis C have been rising since 2013.

INCIDENT PROFILE

A number of West African countries are currently experiencing an outbreak of Meningitis which poses serious health security concerns for the entire region if not properly managed. Since the beginning of 2017, outbreaks of the disease have been recorded in Togo, Nigeria, Niger and Ghana with unconfirmed reports in Benin, Mali, Burkina Faso and Gambia. To date, Nigeria has registered the highest number of cases and is considering the current outbreak as a health emergency. As of 3 April 2017, a total of 2,997 cases had been reported with 336 deaths from the new *Neisseria Meningitides Stereotype C strand*. Affected states include Zamfara, Katsina, Sokoto, Kebbi, Niger, Nassarawa, Jigawa, Abuja-FCT, Gombe, Taraba, Yobe, Kano, Osun, Cross River, Lagos and Plateau States, with a concentration in the northern states of Zamfara, Katsina and Sokoto. The first report of suspected cases began around November of 2016 in Zamfara. In Niger, 921 cases of meningitis including 55 deaths, were recorded between January and March 26, 2017, while at least 201 cases of meningitis were detected in Togo with 17 deaths between 1 January and 10 March 2017. Additionally, Ghana's Health authorities have attributed the death of 9 persons in the Ashanti and Upper West Regions to pneumococcal meningitis out of 69 suspected cases since the beginning of the year.



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RISKS ANALYSIS :

- ❖ All countries within the meningitis belt are at risk of an outbreak. At the current rate, there is the likelihood of more countries becoming affected within the coming weeks/months.
- ❖ Vaccine shortages also pose a major risk factor. Often, responses are reactive and countries wait too long to request for vaccines from WHO. In the case of Nigeria a shortage vaccines for meningitis C has been reported.
- ❖ Road networks in many countries in the region are poor especially outside the capitals making it difficult for vaccines and treatment to reach remote areas where they are often most needed.
- ❖ Artificial and porous borders in the region facilitate the spread of infectious diseases across countries. For instance, a number of affected states in Nigeria share borders with the republic of Niger which accounts to the increasing registered cases in the country
- ❖ So far, in the case of Nigeria, the disease has mostly affected children between the ages of 5-14 years, making it more deadly since these age groups have lower immunity
- ❖ Alleged comments made by the Governor of Zamfara State to the effect that the outbreak of meningitis is a punishment from God on the people for their sins has a potentially retrogressive effect on measures so far put in place to curb the disease especially in a region with high illiteracy rates and a history of being averse to vaccination campaigns.

MECANISMS FOR INTERVENTIONS :

Some of the measures so far taken by governments across the region include :

- Massive sensitization, laboratory investigations analysis and reactive vaccination in Nigeria
- 500,000 doses of meningococcal vaccine have been delivered delivered by WHO and vaccinations have begun in Zamfara state while awaiting the delivery of more vaccines.
- In Togo, a WHO expert mission was deployed in the field to prevent new cases. WHO and the government launched a coordinated response team and 56,000 vaccines were ordered to fight against the disease.
- In Ghana steps to curb future spread have included sensitization and intensified screening in affected areas. The country received \$60,000 worth of laboratory supplies for the testing of meningitis, from the Center for Disease Control and Prevention earlier in the year.
- Niger has a stock of vaccines to take care of at least 25,000 patients. The government has taken important measures such as free treatment of patients and the organization of a vaccination campaign in the epidemic zones.



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RECOMMENDATIONS

- Preventive rather than reactive measures including pre-emptive annual vaccinations in all countries within the meningitis belt .
- Enhanced surveillance to prevent the further spread of the disease especially across borders.
- Enhanced measures for early diagnoses and treatment
- Greater coordination by health authorities across the region to contain the spread
- Compulsory vaccination for persons travelling to affected regions
- Increased Public health education on prevention and management

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