## Meningitis in Nigeria - what's going on?

The ongoing meningitis outbreak in Nigeria is currently a source of grave concern. The latest reports indicate that since December, Nigeria had reported 2996 cases of meningitis across 16 States. Sadly, 336 Nigerians out of that number died. It is a sad moment for the country and we mourn the victims. Given the widespread nature of the meningitis outbreak, many Nigerians are fearful and anxious. However, as with any infectious disease, it is possible to prevent the spread once you understand the epidemiology of the disease.

## What is Meningitis?

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The brain and spinal cord have a protective membrane covering called the meninges. Meningitis is a condition in which the meninges becomes inflamed. This inflammation is usually caused by an infection of the fluid surrounding the brain and spinal cord. Types of meningitis include bacterial, viral, fungal, parasitic, amoebic and non-infectious meningitis.

Meningococcal disease is found worldwide, with the highest incidence of disease found in the 'meningitis belt' of sub-Saharan Africa. In this region, until recently major epidemics have occurred, every 5 to 12 years with attack rates reaching 1,000 cases per 100,000 population. The epidemiology of meningitis is not fully understood, but it is more commonly seen during the dry season, from December to June, in the African meningitis belt. Nigeria lies on the meningitis belt, which stretches from the Sahel region to the Horn of Africa, where type A meningitis outbreaks occurred more commonly. However, the introduction of MenAfriVac® in 2010 via mass vaccination campaigns had an immediate and dramatic impact in breaking the cycle of meningitis A epidemics.

## How is Meningitis transmitted?

The meningitis outbreak currently affecting several states in Nigeria can be traced to a type of Bacterial meningitis scientifically called Neisseria Meningitidis, according to the Nigeria Centre for Disease Control (NCDC). The protection offered by the MenAfriVac® vaccine only covers for Meningitis serogroup A and not the currently circulating serogroup C.

Neisseria meningitidis only infects humans and does not infect animals. The bacteria can be carried in the throat and so can be spread through cough and droplet infections. About 10% to 20% of the population carries this bacteria in their throat at any given time. However, this percentage may increase when certain conditions align. During such times close and prolonged contact such as kissing, sneezing or coughing on someone, or living in close quarters such as a dormitory, sharing eating or drinking utensils with an infected person facilitates the spread of the disease. For reasons not yet fully understood, in some cases the bacteria goes through the blood stream and into the meninges, where it causes the illness - meningitis.

What symptoms should you look out for?

The most common symptoms of meningitis include a stiff neck, high fever, sensitivity to light, confusion, headaches and vomiting. These symptoms mimic other infectious diseases such as malaria. Therefore, it is very important to seek medical care at health centres when you or someone you know experience any or all of these symptoms - especially sudden neck stiffness. Please do not assume that it is something less serious, go and see a healthcare professional.

How is Meningitis treated?

The World Health Organisation (WHO) advises that meningitis should always be viewed as a medical emergency and patients should be admitted and appropriate antibiotic treatment started as soon as possible, preferably after necessary diagnostic tests have been carried out. It is not necessary to isolate a meningitis patient during treatment. The chances of survival are much higher, when treated early.

How can you help prevent Meningitis?

Once a community understands how meningitis is transmitted, it is empowered to help prevent further spread of the disease. It is critical to vaccinate people living in affected areas. If prevention fails, the next key step is early treatment. Also, those already infected should be promptly treated with the right antibiotics. This helps to stop further spread of the infection.

Meningitis is an infectious disease. As a result, it is extremely important for Nigerians to practice good hygiene if we want to prevent the spread of this current outbreak. Hand washing using soap prevents the spread to individuals especially those who care for an infected family member or those who have touched infected objects. Other important preventive measures include covering the mouth while coughing and not spitting indiscriminately in public. If someone you know and care for is infected, please do not share cups and other utensils without washing them with soap and water.

While Nigeria has successfully applied to WHO for a stock of vaccines, which led to delivery of 500,000 doses of vaccine, efforts have been hampered by a global shortage of the vaccine, which is expensive. According to Dr. Chikwe Ihekweazu of NCDC, we really need a sustainable supply of affordable vaccines against meningitis C. He noted that the Federal Government and the National Primary Health Care Agency (NPHCDA) have secured another 800,000 doses of vaccine from the UK. Other states are making efforts towards obtaining reactive vaccines from the International Coordinating Group on Vaccine Provision (ICG).

It is important that communities are made aware of what they can do to prevent the spread of the disease, so that they can seek medical help promptly. Healthcare workers also need to be made aware of the symptoms and appropriate management of cases. The health departments and ministries of local and state governments cannot be asleep. They must take the lead under the aegis and direction of the NCDC and the Federal Ministry of Health to arrest this current outbreak.

Experts have described this as the worst meningitis outbreak in Nigeria in a decade. Certainly, many Nigerians also feel this way. There are many lessons to be learned, and this outbreak underscores the importance of a good surveillance system across the country and the rapid response to localised outbreaks when they occur. Together, we as Nigerians can ensure that this current outbreak ends soon. We are stronger together.

