Key facts on meningococcal meningitis

- Meningococcal meningitis is an infection of the meninges, the thin lining that surrounds the brain and the spinal cord. It is usually caused by a virus or bacterium (meningococcus). Bacterial meningitis can be very serious because it evolves rapidly and can kill in a few hours.

- Even with appropriate treatment, up to 20 percent of survivors are left with significant permanent sequelae such as deafness, epilepsy, cerebral palsy, or mental retardation. If meningococcal disease is accompanied by gangrene or tissue necrosis, total or partial amputation of one or more limbs may be necessary.

- Sub-Saharan Africa experiences explosive and repeated meningitis epidemics in the "meningitis belt," a strip of land that extends from Senegal and the Gambia in the west to Ethiopia and Somalia in the east, whose population is estimated at around 450 million people.

- The most common clinical manifestation is acute meningitis, characterized by fever and chills, headaches, stiff neck, vomiting, lethargy or drowsiness, or signs of irritability. In certain cases, patients develop meningococcal septicemia, which is accompanied by a very high fever, purpuric rash, and vital organ failure, with sudden cardiovascular shock. Meningococcal septicemia is fatal in most cases.

- In sub-Saharan Africa, the disease especially strikes children, adolescents, and young adults. Studies have shown that males are more affected than females. Individuals who live in closed communities are at greatest risk.

- A diagnosis of meningococcal meningitis is usually established by analyzing a sample of cerebrospinal fluid obtained by lumbar puncture.

- Five main meningococcal groups have been identified as A, B, C, W135, and Y. Group A has historically been the main cause of meningococcal meningitis. It continues to predominate in Africa, where it causes most of the large epidemics in the meningitis belt, causing over 85% of the observed cases of meningococcal meningitis.

- The bacteria are transmitted from person to person through exchange of nose or throat secretions during close or intimate contact. Sharing glasses or eating utensils, cigarettes, lipstick, toothbrushes, or musical instruments with mouthpieces favors the spread of the disease, as does kissing, sneezing, or coughing on someone.