ABSTRACT
Background: The Global Meningococcal Initiative (GMI) is led by international experts in meningococcal meningitis, epidemiology, vaccinology, and public health. Its goals are to prevent meningococcal disease (MD) through education, research, and vaccination.
Methods: In January 2011, the GMI met with Indian experts to review India’s MD burden and to explore GMI prevention strategies.
Results: Indian meningococcal meningitis is the third most common cause of bacterial meningitis in India—responsible for 20 to 99 cases per 100,000 population per year. The GMI recommends—in an attempt to avoid confusion between climate and demographic data—more on healthcare than the deployment of staff to collect surveillance data.
Conclusions: Conjugate vaccines should be used for outbreak control and immunization of high-risk persons. Unless robust data are available, it will not be possible to prioritize MD for modern vaccination based on epidemiological evidence.

EPIDEMIOLOGY
Meningococcal meningitis is the third most common cause of bacterial meningitis in India—responsible for 20 to 99 cases per 100,000 population per year. The GMI recommends—in an attempt to avoid confusion between climate and demographic data—more on healthcare than the deployment of staff to collect surveillance data.

PROPOSED RECOMMENDATIONS FOR THE PREVENTION OF MD IN INDIA

Vaccination
Vaccination strategies are not guided by robust epidemiological data. The GMI recommends:

• Establishing routine surveillance for bacterial meningitis,
• Standardizing protocols for laboratory diagnosis, including use of latex agglutination tests and real-time PCR (RT-PCR),
• Developing meningococcal vaccines and serogroup-specific antibodies studies in India. In 2009, the NCDC launched the Integrated Disease Surveillance Project (IDSP), which seeks to detect meningococcal meningitis outbreaks and report timely and action oriented case data.

Immunization
• Reactivation vaccine against MD in India is restricted to outbreak control, a strategic method by historians.
• Some vaccines have a current status and are of relatively short duration, immunological data, with prophylactic adult antibody does not typically achieved and 7-10 days post-vaccination,
• Substantial proportion of MD cases occur before vaccination campaigns are initiated, and mass reactive vaccination against MD is restricted to outbreak control.

In order to establish uniform and cost-effective strategies, the GMI recommends a meningococcal meningitis vaccine to be considered for inclusion in the national vaccine schedule. The GMI recommends a meningococcal meningitis vaccine to be considered for inclusion in the national vaccine schedule.

Surveillance
• MD is a notifiable disease in India, but reporting is not exhaustive, and the health system is focused on more acute and notifiable diseases.
• Coexisting infections are common in meningitis vaccination, but quality control is lacking and different labs have varying sensitivities and specifications for MD meningococcal meningitis.

REFERENCES