

United Nations Medical Directors’ Invasive Meningococcal Disease Risk Mitigation Plan and Recommendations for UN Personnel 21 February 2023

- The following occupational health recommendations are provided by the UN Medical Directors’ to all UN Organizations and apply to all UN personnel to reduce the risk of UN personnel acquiring meningococcal disease caused by the bacteria *Neisseria meningitidis*.
- Invasive meningococcal disease includes clinical syndromes such as meningococemia (bacteria in the blood), and/or meningitis (bacteria in the brain). Note that many different pathogens including bacteria, fungi or viruses can cause meningitis, but the highest global burden is seen with bacterial meningitis.
- There are several different serotypes of *N. meningitidis*. Currently 6 serotypes A, B, C, W, X, and Y are responsible for the cases of diseases reported worldwide. Until recently serogroup A caused most of the epidemic and endemic meningococcal disease in the meningitis belt. With the introduction of vaccination, significant burden of the disease are caused by serogroups C, W and X in epidemic prone areas. There is no vaccination available for the X serotype.
- The disease can occur in a range of situations, from sporadic cases, small clusters to large epidemics throughout the world, with seasonal variations. Geographic distribution and epidemic potential differ according to serogroup.
- **Duty stations should take into account local host country/authorities’ guidance and regulations when implementing these recommendations.**
- Contact dos-dhmosh-public-health@un.org for more information.

Risk Categories	UN Medical Directors’ Recommendations
1 All UN personnel	<ul style="list-style-type: none"> • Be aware that meningococemia and meningococcal meningitis are associated with high case fatality and complications if not treated quickly. • Be aware of signs and symptoms of invasive meningococcal disease (see section 4) • Be aware of the epidemiology of this pathogen. Although this bacteria is present worldwide, the highest burden is seen in sub-Saharan Africa (African meningitis belt). • Ensure meningococcal vaccination status is up to date. This includes routine vaccinations as well as any additional vaccinations that might be required depending on duty station/location of travel and if these areas are actively experiencing an outbreak or not. • Meningococcal meningitis is largely a vaccine preventable disease and several vaccines are available for protection from the most common serogroups causing the disease. More information on vaccination is available here.
2 UN personnel with underlying health conditions	<ul style="list-style-type: none"> • Some individuals, including those with immunodeficiencies (complement deficiencies and HIV in particular), are at higher risk of invasive meningococcal disease. • Risk factors also include living in close proximity to others (such as camps), mass gatherings, military and other occupational settings.

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- Active or passive smoking can also raise the risk of meningitis.
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3 UN managers who approve travel / UN personnel who are travelling or plan to travel

- Generally, there are no restriction in travel in areas that are experiencing meningococcal disease outbreaks, including meningitis.
 - If travelling to an area with high epidemiological risk or an outbreak, ensure travelers have their meningococcal vaccination status up to date (see section 1)
 - Adhere and comply with local health authorities' directives and other meningitis preventive measures.
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4 UN health care workers (HCWs)

- Be aware of signs/symptoms of invasive meningococcal disease (which includes meningitis): severe headache, stiff or painful neck, high fever, sensitivity to light, drowsiness/confusion/comatose state, seizures, rash (non-blanchable), vomiting.
 - Stay up to date on clinical management recommendations for invasive meningococcal disease including antibiotic choice.
 - During epidemics of meningococcal and pneumococcal meningitis, ceftriaxone is the drug of choice.
 - Ensure patients are isolated under contact and droplet precautions for the duration of their infective period (typically 24 hours after effective antibiotics).
 - Be aware of complications that can occur from invasive meningococcal disease including hearing loss, seizures, limb weakness and difficulties with vision.
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5 UN personnel with confirmed invasive meningococcal disease

- Seek immediate medical attention if you think you have signs/symptoms compatible with invasive meningococcal disease.
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6 Contacts of individuals with invasive meningococcal disease

- Antibiotic prophylaxis of close contacts of those with meningococcal diseases should be given as it decreases the risk of transmission.
 - Outside the African meningitis belt, chemoprophylaxis is recommended for close contacts within the household.
 - Within the meningitis belt, chemoprophylaxis for close contacts is recommended in non-epidemic situations. Drugs of choice include ciprofloxacin and ceftriaxone as an alternative agent. See [here](#) for more information.
 - Depending on the nature of the contact, chemoprophylaxis may also be recommended for occupational exposures.
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References:

- <https://www.who.int/teams/immunization-vaccines-and-biologicals/diseases/meningitis>
- <https://www.who.int/news-room/fact-sheets/detail/meningitis>