

Regional Office for the Eastern Mediterranean

Weekly Epidemiological Monitor

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Current major events

Diphtheria in Afghanistan ?

The Disease Early Warning System in Afghanistan has recently detected a suspected case of Diphtheria in the regional hospital of Herat province on 22 June 2010. The suspected case is a 20 years old, married woman who resides in Herat City. She has been treated with Diphtheria Antitoxin and Antibiotic (Penicillin) and she is currently recovering. No other cases have been detected so far,. The close contacts of this suspected case has been put under observation and have received single prophylactic dose of Benzathin Penicillin. Throat swab has been collected and sent to the Central Public Health Laboratory for laboratory confirmation.

Editorial note

Following the introduction of routine immunization with diphtheria toxoid in the 1940s and 1950s, diphtheria incidence declined dramatically in countries of the industrialized world. At the beginning of the 1980s many of these countries were progressing toward elimination of the disease. However, since the mid-1980s there has been a striking resurgence of diphtheria in several countries of Eastern Europe. The main reasons for the return of diphtheria in these countries were: decreasing immunization coverage among infants and children, waning immunity to diphtheria in adults, movements of the population during the last few years, and an irregular supply of vaccines.

In developing countries, routine immunization against diphtheria was introduced in the late 1970s with the Expanded Programme on Immunization. In these countries, although the coverage of infants with 3 doses of diphtheria toxoid reached significantly high in the 1990s, diphtheria outbreaks were reported from a number of countries including Sudan in the EMR. These outbreaks demonstrated a shift in the age distribution of cases to older children and adults.



Facts on Diphtheria

- Etiologic agent: Toxin producing strains of *Corynebacterium diphtheriae*
- **Clinical features:** sore throat with lowgrade fever and an adherent membrane of the tonsils, pharynx or nose.
- Transmission: Direct person-to-person
- **Risk groups**: Children in the pre-vaccine ear but recently adults have primarily been affected in large epidemics;
- Incidence and fatality: Approximately 0.5-1 per 100,000 population. Sometimes more. Between 5% and 10% patients may die.
- Incubation period: 2 to 5 days

In the context of Afghanistan, a diphtheria outbreak is possible given that the country is in complex emergency situation for a long period. Thus, several factors may contribute to the spread of the epidemic- like the presence of highly susceptible child and adult populations, socioeconomic instability, population movement, and a deteriorating health infrastructure.

Rapid clinical and public health responses are required to control diphtheria outbreaks. Three major measures are indicated: high immunization coverage of target groups, prompt diagnosis and management of diphtheria cases, and rapid identification of close contacts with their effective management to prevent secondary cases. It is reassuring to know that appropriate steps have been undertaken by the Government to prevent an outbreak of diphtheria from this suspected case that has been reported.

Update on outbreaks

in the Eastern Mediterranean Region

Cholera in Djibouti; **Dengue** in Yemen and Sudan

Current public health events of international concern [cumulative N° of cases (deaths), CFR %]	
Avian influenz	a
Egypt	[109 (34), 31.1%]
Indonesia	[165 (136), 82.4 %]
China	[39 (26), 66.6%]
Global total	[499(295), 59.1%]
Dengue fever	
Sudan	[3000 (12), 0.4%]
Yemen	[8109 (10), 0.1%]
Meningococcal meningitis	
Sudan	[819 (38), 4.6 %]
Chad	[167 (12), 7.1%]
Pandemic (H1N1) 2009	
AFRO	No of deaths: 168
AMRO	No of deaths: At least 8450
EMRO	No of deaths: 1019
EURO	No of deaths: At least 4879
SEARO	No of deaths: 1852
WPRO	No of deaths: 1841
GLOBAL Total	No of deaths: 18,209

CFR=Case-Fatality Rate

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