

PRIMARY RISK ASSESSMENT

International cases of meningococcal disease in Scouts
returning from a Scout Jamboree in Japan

Date of the signal	Date of the RA	Signal provider	Experts consultation	Method
14/08/2015	18/08/2015	EWRS	Permanent experts: Dr Sophie Quoilin, Dr Daniel Reynders, Dr. Valeska Laisnez, Dr Carole Schirvel, Mr Jean-Marie Trémérie, Mme M. Mendez. Specific experts : Sophie Bertrand, Corine Bleyenheuft	Email consultation
Date of update	Closing date			
03/06/2015				

RAG persons of contact:

Dr Tinne Lernout (tinne.lernout@wiv-isp.be), Javiera rebollo (javiera.rebolledo@wiv-isp.be)

RAPID RISK ASSESSMENT OF POTENTIAL PUBLIC HEALTH EVENT

Signal	<p>On 13 August, the UK reported two confirmed cases of meningococcal disease in Scouts from Scotland who returned from the 23rd World Scout Jamboree in Japan. The onset of illness of the first case was 8 August (on his return journey) and 11th August for the second. Both cases were admitted to hospital on 11th August 2015. An additional case (third) was confirmed on 14th August. One of the cases has been confirmed as having capsular group W meningococcal disease. All three cases are in the same scout group and they returned to Scotland on 8th August.</p> <p>On 17th August, Sweden reported three suspected cases of meningococcal infection in Swedish participants who have returned after attending the same Jamboree in Japan. As of 18th August, one is confirmed (This case returned from Japan on 9th August and fell ill on the 14th), one case is highly probable and third case is unlikely to be a case as all samples have so far been negative indicating a probably viral infection.</p> <p>The 23rd World Scout Jamboree took place in Kirara-hama, Yamaguchi in Western Japan from 28 July to 8 August 2015. Over 30 000 scouts attended this World Scout Jamboree, which is a gathering of Scouts and Guides from almost every country in the world who, for ten days, live together, experience each other's cultures and take part in different activities, with important mix of nationalities during the activities.</p> <p>In Belgium, around 570 scout from five Scout associations (Les Scouts, Les Scouts et Guides Pluralistes, les Guides Catholiques de Belgique, Scouts and Gidsen Vlaanderen and FOS Open Scouting) have participated to the Jamboree in Japan.</p>		
Description		Score	Description / arguments
1	Cause known?	Yes	<p>Meningococcal disease is caused by <i>Neisseria meningitidis</i>, a bacterium with human carriers as the only reservoir. It is carried in the nose, where it can remain for long periods without producing symptoms.</p> <p>There are 12 serogroups of <i>N. meningitidis</i> that have been identified, 6 of which (A, B, C, W, X and Y) can cause epidemics. Geographic distribution and epidemic potential differ according to serogroup.</p> <p>Transmission is by direct and close (< 1 meter) contact through droplets of naso-pharyngeal secretions (kissing, sneezing, coughing).</p> <p>Incubation period is between 2 and 10 days, generally 3 to 4 days.</p> <p>Following exposure (inhalation of infective droplets) a carrier state may develop and last for some time. Due to a series of factors, a very low proportion of carriers (less than 1%) will eventually become ill. This most frequently occurs in young children, but a second disease peak is observed among adolescents and young adults.</p> <p>The clinical picture is very serious, and may present as meningitis and severe blood infection.</p>
2	Unexpected/unusual	Unusual	<p>In 2014, 87 cases of invasive meningococcal diseases have been reported by the national reference centre in Belgium. Most of them were found in children younger than 5 years old (37,9%). Older children (10-14 years old) represent only 3,4% of cases,</p>

			and teenagers (15-19 years old) 14,9%. Overcrowding is a known risk factor for invasive meningococcal disease. ECDC considers that the current signal is not an unexpected health event at mass gatherings.
3	Severity	High	- The lethality of the infection with <i>Neisseria meningitidis</i> is 5-10%. - 10 to 20% of survivors present with sequelae (deafness, epilepsy, amputation, mental retardation,...)
4	Dissemination (Low/Medium/High)	Very Low	- Limited number of cases in Scouts from Scotland and (possibly) Sweden. - No cases or suspected cases currently reported in Belgium or other European countries. - The incubation period since last contact with Scouts from the Jamboree is almost over (last day of the Jamboree was 8 th of August).
5	Risk of (inter)national spread	Very Low	

Preparedness and response			
6	Preparedness	High	- Meningococcal disease is mandatory notifiable in the 3 regions. - Expertise for diagnosis exists at the National Reference Center (WIV-ISP).
7	Specific control measures (surveillance, control, communication)		On 18/08/2015, the five Scouts associations have been contacted by the regional competent authorities to inform them on the event and request them to put an information/warning message on their respective website. Vaccination of the Belgian participants or antibiotic prophylaxis has not been recommended.
Public health impact			
A	Public health impact in Belgium (Low/Medium/high)	Very Low	- No cases have currently been reported in Belgium. - The incubation period since last contact with Scouts from the Jamboree is almost over (last day of the Jamboree was 8 th of August).
B	Recommendations (surveillance, control, communication)		- Strengthened surveillance of possible cases and follow-up of the international situation. - Vaccination of the Belgian participants or antibiotic prophylaxis is not recommended. ECDC assessed that there aren't specific measures to be taken in countries with participants involved in that event, other than those usually taken in meningitis outbreaks at national level.
C	Actions		No further actions are needed.

REFERENCES

- Annual epidemiological report Vaccine-preventable diseases – invasive bacterial diseases 2014. [Online]: <http://ecdc.europa.eu/en/publications/Publications/AER-VPD-IBD-2014.pdf>
- Hoek M, Hanquet G, Heuberger S, Stefanoff P, Zucs P, Ramsay M, Stuart J ; European Union Invasive Bacterial Infections Surveillance Network (EU-IBIS). A European survey on public health policies for managing cases of meningococcal disease and their contacts. *Euro Surveill.* 2008 Mar 6; 13 (10). Pii: 8060.
- Organisation Mondiale de la Santé (OMS) – World Health Organisation (WHO). (page consultée le 06/01/14). Meningococcal disease, [Online]. <http://www.who.int/csr/disease/meningococcal/en/index.html> ; <http://www.who.int/mediacentre/factsheets/fs141/en/>
- . European Center for Disease Prevention and Control (ECDC). (page consultée le 06/01/14). Case definitions [Online]. <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:262:0001:0057:EN:PDF>
- Vescio F, Busani L, Mughini GL, Fazio C, Neri A, Avellis L *et al.*: Climate, demographic factors and geographical variations in the incidence of invasive meningococcal disease in Italy. *Epidemiol Infect* 2014, 1-9.