## **Senate Community Affairs Committee**

#### ANSWERS TO ESTIMATES QUESTIONS ON NOTICE

#### **HEALTH PORTFOLIO**

# Additional Estimates 2015 - 2016, 10 February 2016

**Ref No:** SQ16-000218

**OUTCOME:** 9 - Biosecurity and Emergency Response

**Topic:** Lyme Disease

Type of Question: Written Question on Notice

Senator: Madigan, John

#### **Question:**

In October I also asked about Australian diagnostic guidelines for Lyme disease[Ref No: SQ15-000754]. You answered that the Departments guideline was for overseas acquired Lyme disease. The Department has omitted the single diagnostic sign, determined by the CDC in the USA for Lyme disease acquired there, that unequivocally diagnoses Lyme disease; that is the pathognomonic bulls-eye rash.

- a) Why has this been omitted from the diagnostic criteria of the Australian guideline?
- b) Why does the Australian diagnostic guideline differ from the USA who have more than 300,000 cases of Lyme disease p.a. and much more experience in the diagnosis and treatment of Lyme disease?
- c) The guideline also states "an annular rash, Erythema Migrans may be present in 70–80% of patients presenting with Lyme disease"; from where and what is the research basis of the 70-80% assertion?

## Answer:

- a) The pathognomic sign referred to is Erythema migrans. This sign is not omitted from the "Australian guidelines for the diagnosis of overseas acquired Lyme disease". The fifth paragraph in the section named "Purpose" provides an explanation why laboratory diagnostic testing is necessary. "As a guidance document, laboratory diagnostic testing is required for two reasons:
  - i) For overseas acquired infection by the genogroup *Borrelia burgdorferi* sensu lato, unless the clinician is familiar with the pathognomonic erythema migrans rash, it is clinically safer to obtain supportive evidence of infection through diagnostic testing; and
  - ii) diagnostic laboratory support is preferred for patients presenting with nonspecific signs and symptoms of a disease or syndrome, notwithstanding the limitations of diagnostic tests."
- b) In addition to the answer 14.a. the "Australian guidelines for the diagnosis of overseas acquired Lyme disease" also considers classical Lyme disease acquired from other endemic (disease regularly found among particular people or in a certain area) locations. In the section named "Epidemiological evidence" endemic areas have been described.

"In the USA, 13 states in the north east where *Ixodes scapularis* is prevalent account for 95 per cent of reported cases; these states include Connecticut, Delaware, Maine, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Vermont, Virginia, and Wisconsin. In Europe the regions with highest prevalence include Germany, Austria, Slovenia, and Sweden. Lyme disease has been also diagnosed in the United Kingdom. Lyme disease can also be acquired in Russia, Japan, and China."

c) From the Centers for Disease Control and Prevention website on Signs and Symptoms of Untreated Lyme Disease (<a href="http://www.cdc.gov/lyme/signs\_symptoms/">http://www.cdc.gov/lyme/signs\_symptoms/</a>)