1 **S1.** Appendix Ontario Lyme disease case definitions: 2005–14. 2 2005-2008 3 **Confirmed case** 4 **Endemic** 5 (a) Isolation of Borrelia burgdorferi from a clinical specimen OR 6 (b) Erythema migrans observed by a physician OR (c) At least one clinically compatible late manifestation (neurologic, cardiac or musculoskeletal) AND 7 8 laboratory evidence of *B. burgdorferi* infection 9 Non-endemic 10 (d) Erythema migrans observed by a physician and laboratory evidence of B. burgdorferi infection **Probable Case** 11 12 **Endemic** 13 (a) Physician recognition of erythema migrans as reported by patient Non-endemic 14 15 (b) Compatible late manifestation (neurologic, cardiac or musculoskeletal) AND laboratory 16 evidence for B. burgdorferi infection 17 2009-2014 18 19 **Confirmed case** 20 (a) Erythema migrans (EM) with laboratory confirmation by polymerase chain reaction (PCR) or culture 21 OR 22 (b) EM with laboratory support by serological methods, and a history of residence in, or visit to, an 23 endemic area OR

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- 24 (c) Objective symptoms of disseminated Lyme disease with laboratory confirmation by PCR or culture
- 25 **OR**
- 26 (d) Objective symptoms of disseminated Lyme disease with laboratory support by serological methods,
- 27 **AND** a history of residence in, or visit to, an endemic area
- 28 Probable case
- 29 (a) EM with laboratory support by serological methods but with no history of residence in, or visit to, an
- 30 endemic area OR
- 31 (b) Objective symptoms of disseminated Lyme disease with laboratory support by serological methods,
- 32 but with no history of residence in, or visit to an endemic area **OR**
- 33 (c) EM without laboratory confirmation, but with history of residence in, or visit to, an endemic area.