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Deputy Pauline Tully
Dáil Éireann,
Kildare Street,
Dublin 2

Re: PQ1399/22 To ask the Minister for Health the number of persons that were tested for Lyme disease here in each of the years 2017 to 2021; the number of persons that were diagnosed with Lyme disease over the same period; the number of staff employed in this area; the type of tests carried out for Lyme disease here; if these tests are routine; and if he will make a statement on the matter.

Dear Deputy Tully

I refer to the above Parliamentary Question which has been referred by the Minister for Health to the Health Service Executive for direct response.

Data on number of cases of Lyme disease in Ireland is available on the HPSC website at <https://www.hpsc.ie/a-z/vectorborne/lymedisease/>.

There is no systematic collection of the testing data you requested however the following information may be of assistance to you.

Borrelia burgdorferi, the bacteria responsible for Lyme disease, is not readily grown in the laboratory; instead diagnosis of Lyme disease is dependent on demonstrating the production of antibodies to the Lyme bacteria. Antibody production takes 2-4 weeks to occur after infection. As with all diagnostic tests it is essential to ensure that only properly validated tests are used. Non-validated tests, which have a higher likelihood of producing misleading results, pose a clinical risk of misdiagnosis, exposing patients to inappropriate treatment as well as a delay in correctly diagnosing their symptoms.

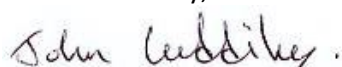
In Ireland, antibody testing for Lyme disease, which is nationally available, is performed using a 2 stage process in line with a recommendation by the US Centres for Disease Control and Prevention (CDC) which is endorsed by the Infectious Disease Society of America (IDSA), the European Federation of Neurological Societies (EFNS) and the British Infection Association (BIA)^(2,3) The first stage is a sensitive screening test, performed on a blood sample. Within the public healthcare system in Ireland four laboratories accredited by INAB provide this service using validated assays. However, the first stage assays can give positive results in cases other than Lyme disease e.g. in patients with autoimmune disease. Therefore, a second more specific test (the immunoblot test) is needed to establish a diagnosis of Lyme disease. When samples are positive or equivocal in the first test they are referred for confirmatory immunoblot. At present this testing is not performed in Ireland, with Irish diagnostic laboratories referring to the

Rare and Imported Pathogens Laboratory, Public Health England in Porton Down. This means that Irish patients and their doctors have access to the expertise available in a major International Reference Laboratory.

Diagnosis of erythema migrans is based on clinical appearance and assessment of tick exposure risk. As this is an early manifestation of disease, antibodies may not be present. At this stage, treatment with antibiotics does not depend on a laboratory result. In later stages of infection, the antibody test is usually strongly positive.^(1,4) As with all diagnostic tests, the test must be interpreted in the light of the patient's symptoms, to ensure appropriate diagnosis. In rare complex cases, additional testing including molecular (PCR) tests and testing for antibodies in cerebrospinal fluid (CSF) can be accessed through the Rare and Imported Pathogens Laboratory, Public Health England.

If you require any further information or clarification please do contact us.

Yours sincerely,



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References

1. <https://ecdc.europa.eu/en/borreliosis/facts/factsheet>
2. <http://www.hpsc.ie/a-z/vectorborne/lymedisease/factsheet/lymetesting/>
3. https://www.cdc.gov/lyme/healthcare/clinician_twotier.html
4. <http://www.hpsc.ie/a-z/vectorborne/lymedisease/informationforhealthcareprofessionals/File,14649,en.pdf>