

**HANSEN’S DISEASE – LEPROSY****NON-IMMEDIATE NOTIFICATION****EPIDEMIOLOGY PROGRAM**

Event Name:	LEP
Event Time Period:	Lifelong immunity or as described in the position statement, to be reviewed on a case by case basis
Clinical Description: CSTE 2024 24-ID-05	<p>Leprosy (Hansen’s disease) is a highly variable disease. The spectrum of disease ranges from a single macule or plaque on the skin or single nerve thickening to diffuse involvement of skin, multiple nerves, and internal organs. Clinical presentation may change depending on the immune status of the affected individual.</p> <p><b>Clinical Criteria</b> A clinically compatible illness characterized by:</p> <ul style="list-style-type: none"><li>• Any of the following skin lesions:<ul style="list-style-type: none"><li>• an ill-defined hypopigmented or erythematous macule or patch</li><li>• a few well-demarcated, hypopigmented, or erythematous skin lesions with reduced sensation</li><li>• multiple diffuse erythematous papules and nodules on arms and legs, sparing the torso</li><li>• an infiltration of skin, progressing to thickened skin, possibly with reduced sensation</li><li>• diffuse infiltration of the skin and neuropathy (e.g., “glove and stocking”) (representing diffuse leprosy)</li></ul></li></ul> <p><b>OR</b></p> <ul style="list-style-type: none"><li>• The absence of skin lesions and thickening of a peripheral nerve trunk with pain or tenderness of the nerve (representing primary neural leprosy).</li></ul>
Epidemiologic Linkage Criteria: CSTE 2024 24-ID-05	<ul style="list-style-type: none"><li>• Prolonged close contact with an untreated person with new or recurring leprosy,</li></ul> <p><b>OR</b></p> <ul style="list-style-type: none"><li>• Residency or repeated travel in a region with higher endemicity (prevalence &gt;1 case per 10,000 population or new case detection rate <math>\geq</math> 50 per million population per year) for leprosy,</li></ul> <p><b>OR</b></p> <ul style="list-style-type: none"><li>• Prolonged or frequent, direct contact* with armadillos, especially nine-banded armadillos, or soil in the environment in which they live.</li></ul>

CSTE Event Classification: CSTE 2024 24-ID-05	<i>Confirmed</i>	Meets clinical criteria <b>AND</b> confirmatory laboratory evidence of: <ul style="list-style-type: none"> <li>Detection of acid-fast bacilli in a nerve by the Fite-Faraco method,</li> </ul> <b>OR</b> <ul style="list-style-type: none"> <li>Detection of acid-fast bacilli in skin by the Fite-Faraco method, without growth of mycobacteria on culture** (if done),</li> </ul> <b>OR</b> <ul style="list-style-type: none"> <li>Detection of <i>M. leprae</i> or <i>M. lepromatosis</i> in skin or a nerve by a nucleic acid detection test***</li> </ul>
	<i>Probable</i>	Meets clinical criteria for primary neural leprosy <b>AND</b> meets epidemiologic linkage criteria.
	<i>Suspect</i>	Meets clinical criteria for a clinically compatible illness with skin lesions <b>AND</b> meets epidemiologic linkage criteria <b>OR</b> Meets clinical criteria for a clinically compatible illness with skin lesions <b>AND</b> meets supportive laboratory evidence of: <ul style="list-style-type: none"> <li>Detection of non-sarcoid non-caseating granuloma with peripheral nerve involvement, without growth of mycobacteria on culture** (if done)</li> </ul>
Massachusetts Event Classification (2024):	<i>Follows CDC event classification</i>	

*\*Prolonged or frequent direct contact refers to activities such as raising, maintaining, butchering, hunting, field dressing, or consuming armadillos. It does not refer to brief, cursory, or sporadic touching such as might occur with a visitor to a petting zoo.*

*\*\* If acid-fast bacilli are detected in skin only, mycobacterial culture negativity is highly recommended to rule out infection with mycobacteria other than those in the *M. leprae* complex. To rule out *M. haemophilum*, hemin or iron-citrate containing medium would be needed. To rule out *M. xenopi* or *M. marinum*, incubation at 42 and 30 degrees centigrade, respectively, would be needed.*

*\*\*\* Note that a negative nucleic acid test on a tissue specimen does not rule out *Mycobacterium leprae* or *Mycobacterium lepromatosis* as the cause of illness.*

Report Type	Test Type	Source	Result	New event or beyond report period?	Data Entry
Laboratory report <b>OR</b> Boston Reporting Card	PCR or other NAA tests	Skin, dermal nerve, biopsy of lepomatous lesion	<i>Mycobacterium leprae</i> OR <i>Mycobacterium lepromatosis</i>	Yes	New event SUSPECT
				No	Same event
Select:	Microorganism : PrId : Pt : Islt : Nom : Mycobacterial subtyping				
Laboratory report <b>OR</b> Boston Reporting Card	Fite stain	Skin, dermal nerve, biopsy of lepomatous lesion	Acid-fast bacilli	Yes	New event SUSPECT
				No	Same event
Select:	Microscopy : PrId : Pt : xxx : Nom : xxx stain				
Laboratory report <b>OR</b> Boston Reporting Card	Fite stain	Skin, dermal nerve, biopsy of lepomatous lesion	Acid-fast bacilli	Yes	New event SUSPECT
				No	Same event
Select:	Microscopic observation : PrId : Pt : Tiss : Nom : Fite-Faraco stain				