

TABLE 251-1 GEOGRAPHIC DISTRIBUTION AND CHARACTERISTIC EPIDEMIOLOGY OF LEISHMANIASES

Organism, Endemic Region	Clinical Syndrome	Species	Vector	Reservoir	Transmission	Setting
<i>Leishmania donovani</i> Complex						
South Asia	VL, PKDL	<i>L. donovani</i>	<i>Phlebotomus argentipes</i>	Humans	Anthroponotic	Rural, domestic
Sudan, South Sudan, Somalia, Ethiopia, Kenya, Uganda	VL, PKDL	<i>L. donovani</i>	<i>P. orientalis</i> , <i>P. martini</i>	Humans, rodents in Sudan, canines	Anthroponotic, occasionally zoonotic	Majority peridomestic, occasionally sylvatic
Mediterranean basin, Middle East, central Asia, China	VL, CL	<i>L. infantum</i>	<i>P. perniciosus</i> , <i>P. ariasi</i>	Dogs, foxes, jackals	Zoonotic	Domestic, peridomestic
Middle East, Saudi Arabia, Yemen	VL	<i>L. donovani</i>	<i>P. perniciosus</i> , <i>P. ariasi</i>	Dogs, foxes, jackals	Zoonotic	Domestic, peridomestic
Central and South America	VL, CL	<i>L. infantum</i> ^a	<i>Lutzomyia longipalpis</i>	Foxes, dogs, opossums	Zoonotic	Domestic, peridomestic, periurban
Azerbaijan, Armenia, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan	VL	<i>L. infantum</i>	<i>P. turanicus</i>	Humans, dogs, foxes	Anthroponotic, zoonotic	Domestic
<i>L. tropica</i>						
Western India to Turkey, parts of North and East Africa	CL, leishmaniasis recidivans	<i>L. tropica</i>	<i>P. sergenti</i>	Humans	Anthroponotic	Urban domestic, peridomestic
<i>L. major</i>						
Western and Central Asia, North and sub-Saharan Africa	CL	<i>L. major</i>	<i>P. papatasi</i> , <i>P. duboscqi</i>	Nile rats, rodents	Zoonotic	Sylvatic, peridomestic
Kazakhstan, Turkmenistan, Uzbekistan	CL	<i>L. major</i>	<i>P. papatasi</i> , <i>P. duboscqi</i>	Gerbils	Zoonotic	Rural
<i>L. aethiopica</i>						
Ethiopia, Uganda, Kenya	CL, DCL	<i>L. aethiopica</i>	<i>P. longipes</i> , <i>P. pedifer</i>	Hyraxes	Zoonotic	Sylvatic, peridomestic
Subspecies <i>Viannia</i>						
Peru, Ecuador	CL, ML	<i>L. (V.) peruviana</i>	<i>Lutzomyia verrucarum</i> , <i>L. peruensis</i>	Wild rodents	Zoonotic	Andean Valleys
Guyana, Surinam, French Guyana, Ecuador, Brazil, Colombia, Bolivia	CL, ML	<i>L. (V.) guyanensis</i>	<i>L. umbratilis</i>	Sloths, arboreal anteaters, opossums	Zoonotic	Tropical forest
Central America, Ecuador, Colombia	CL, ML	<i>L. (V.) panamensis</i>	<i>L. trapidoi</i>	Sloths	Zoonotic	Tropical forest and deforested areas
South and Central America	CL, ML	<i>L. (V.) braziliensis</i>	<i>Lutzomyia</i> spp., <i>L. umbratilis</i> , <i>Psychodopygus wellcomei</i>	Forest rodents, peridomestic animals	Zoonotic	Tropical forest and deforested areas
<i>L. mexicana</i> Complex						
Central America and northern parts of South America	CL, ML, DCL	<i>L. amazonensis</i>	<i>L. flaviscutellata</i>	Forest rodents	Zoonotic	Tropical forest and deforested areas
	CL, ML, DCL	<i>L. mexicana</i>	<i>L. olmeca</i>	Variety of forest rodents and marsupials	Zoonotic	Tropical forest and deforested areas
	CL, DCL	<i>L. pifanoi</i>	<i>L. olmeca</i>	Variety of forest rodents and marsupials	Zoonotic	Tropical forest and deforested areas

^a*L. infantum* is designated *L. chagasi* in the New World.

Abbreviations: CL, cutaneous leishmaniasis; DCL, diffuse cutaneous leishmaniasis; ML, mucosal leishmaniasis; PKDL, post-kala-azar dermal leishmaniasis; VL, visceral leishmaniasis.

Mediterranean VL, long an established endemic disease due to *L. infantum*, has a large canine reservoir and was seen primarily in infants before the advent of HIV infection. In Mediterranean Europe, 70% of adult VL cases are associated with HIV co-infection. The combination is deadly because of the impact of the two infections together

on the immune system. IV drug users are at particular risk. Other forms of immunosuppression (e.g., that associated with organ transplantation) also predispose to VL. In the Americas, disease caused by *L. infantum* is endemic from Mexico to Argentina, but 90% of cases in the New World are reported from northeastern Brazil.