Morocco

COUNTRY GENERAL INFORMATION (WHO, 2015)

Total population: 34,378,000
Gender F/M (%): 50.6 / 49.4
Population, age group <15/ ≥15 years (%): 28 / 72
Life expectancy at birth (F/M, years) (2015): 75 / 73
GDP (PPP int $): 7,000
Income status: Lower middle
Number of 3rd sub-national administrative level divisions, name: 1554, Commune

EPIDEMIOLOGY

Endemicity status:
- VL: Endemic
- ACL: Endemic
- ZCL: Endemic
- MCL: Non endemic

Number of new cases (incidence):
- VL: 83
- ACL: 1,863
- ZCL: 946
- MCL: N/A

Number of relapses:
- VL: 3
- ACL: No data
- ZCL: 3
- MCL: N/A

Total number of cases:
- VL: 86
- ACL: 1,863
- ZCL: 949
- MCL: N/A

Imported cases (#, %):
- VL: 2, 2%
- ACL: 0, 0%
- ZCL: 0, 0%
- MCL: No data

Gender distribution (% F):
- VL: 39%
- ACL: 56%
- ZCL: 54%
- MCL: N/A

Age group distribution (%, < 5/5-14/>14):
- VL: (67/18/14)
- ACL: (41/30/30)
- ZCL: (31/31/38)
- MCL: N/A

Incidence rate (cases/10,000 population in endemic areas):
- VL: 0.67
- ACL: 3.04
- ZCL: 73.88
- MCL: N/A

Number of endemic 3rd sub-national administrative level divisions:
- VL: 84
- ACL: 292
- ZCL: 64
- MCL: N/A

Population at risk (% at risk/total population):
- VL: 4%
- ACL: 18%
- ZCL: 18%
- MCL: N/A

Was there any outbreak?
- VL: Yes
- ACL: Yes
- ZCL: Yes
- MCL: N/A

Number of new 3rd foci:
- VL: 0
- ACL: 2
- ZCL: 1
- MCL: N/A

N/A = Not applicable; 1: Relapse in this country is defined as: “Reappearance of clinical and biological symptoms after 21 days of treatment”; 2: Defined as “Number of people living in 3rd sub-national administrative level endemic areas”; 3: Defined as “In this reporting period, an area at the 3rd sub-national administrative level reporting cases for the first time ever”.

Monthly distribution of new cases (January-December)

<table>
<thead>
<tr>
<th>Year</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>VL</td>
<td>7</td>
<td>12</td>
<td>10</td>
<td>7</td>
<td>10</td>
<td>3</td>
<td>9</td>
<td>8</td>
<td>4</td>
<td>7</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>ACL</td>
<td>218</td>
<td>186</td>
<td>253</td>
<td>277</td>
<td>167</td>
<td>144</td>
<td>92</td>
<td>68</td>
<td>70</td>
<td>100</td>
<td>132</td>
<td>156</td>
</tr>
<tr>
<td>ZCL</td>
<td>172</td>
<td>79</td>
<td>35</td>
<td>50</td>
<td>38</td>
<td>20</td>
<td>9</td>
<td>9</td>
<td>15</td>
<td>40</td>
<td>163</td>
<td>319</td>
</tr>
</tbody>
</table>

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Incidence rate/10,000 (at the national level) and number of new cases from 1998 to 2015
Disease distribution of new VL and CL cases at province level per 10,000 population (2015)

**Visceral leishmaniasis**

![Visceral leishmaniasis map](https://www.who.int/leishmaniasis/Map-VL-Morocco-2015.png)

**Cutaneous leishmaniasis**

![Cutaneous leishmaniasis map](https://www.who.int/leishmaniasis/Map-ACL-Morocco-2015.png)

CONTROL AND SURVEILLANCE

Year Leishmaniasis National Control Programme (LNCP) was established: 1997

Type of surveillance: Integrated

Is there a vector control programme? Yes

Type of insecticide used for Indoor residual Spraying (IRS): Pyrethroids

Year latest national guidelines: 2010

Is leishmaniasis notifiable (mandatory report)? Yes

Is there a reservoir host control programme? Yes

Number of leishmaniasis health facilities: 35

**DIAGNOSIS**

Number of people screened actively for:
- VL: 3,000
- ACL: 715,000
- ZCL: 310,000
- MCL: N/A

Number of people screened passively for:
- VL: 86
- ACL: 570,000
- ZCL: 430,575
- MCL: N/A

Number of people screened actively for:
- VL: 3,000
- ACL: 715,000
- ZCL: 310,000
- MCL: N/A

Proportion of positive RDT* (%): N/A

Cases diagnosed by direct exam* (parasitology) (%):
- VL: 4%, (3/83)
- ACL: 11%, (197/1863)
- ZCL: 77%, (724/946)

Proportion of positive slides* (%):
- VL: 43%, (1666/3846)
- ACL: 47%, (222/474)

Proportion of cases treated (%, # treated cases/total cases): 100%, (83/83)

Initial cure rate (%): 95%, (79/83)

Failure rate* (%): 1%, (1/83)

Case fatality rate* (%): 4%, (3/83)

TREATMENT AND MEDICINES

Is treatment provided for free in the public sector? Yes

Antileishmanial medicines included in the National Medicine List: Meglumine antimoniate

**TREATMENT OUTCOME**

<table>
<thead>
<tr>
<th></th>
<th>VL</th>
<th>ACL</th>
<th>ZCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of cases treated (%, # treated cases/total cases):</td>
<td>100%, (83/83)</td>
<td>100%, (1863/1863)</td>
<td>100%, (946/946)</td>
</tr>
<tr>
<td>Initial cure rate (%):</td>
<td>95%, (79/83)</td>
<td>100%, (1862/1863)</td>
<td>100%, (945/946)</td>
</tr>
<tr>
<td>Failure rate* (%):</td>
<td>1%, (1/83)</td>
<td>No data (0/1863)</td>
<td>0%, (1/946)</td>
</tr>
<tr>
<td>Case fatality rate* (%):</td>
<td>4%, (3/83)</td>
<td>No data (0/1863)</td>
<td>No data (0/946)</td>
</tr>
</tbody>
</table>

VL = visceral leishmaniasis; ACL = Anthroponotic cutaneous leishmaniasis; ZCL = Zoological cutaneous leishmaniasis; MCL = mucocutaneous leishmaniasis

N/A = Not applicable; RDT = rapid diagnostic test; HIV = human immunodeficiency virus

* These indicators only apply for new cases