

Household Questionnaire

Environmental risk factors for visceral leishmaniasis in West Pokot, Kenya

Date of the interview (dd/mm/yyyy)	__/__/____
Starting time of the interview (hh:mm)	__:__
Name of the interviewer	
Participant identification number (IDNR) For hospital patients, same as assigned in the cross-sectional study	
Physical address of the participant	

This structured questionnaire may be administered directly to participants aged 15 and above. For participants younger than 15, the questionnaire should be administered to the participant's parent or legal guardian.

Part 1 - Participant information

Nr.	Question	Answer	Answer options
1	Age (write 00 if less than 1 year)	_ _ years	-
2	Sex	_	1. Male 2. Female
3	In case of a child <15 years: what is the relationship of the respondent with the child?	_	1. Mother 2. Father 3. Legal guardian 4. Other, specify: _____ 5. Not applicable 9. Don't know/don't want to share

Part 2 - Household and socioeconomic characteristics

	How many persons are members of the household for each of the following age groups? (including the participant and persons temporarily absent)	Male	Female
4	<10 years	_ _	_ _
5	10-19 years	_ _	_ _
6	20-29 years	_ _	_ _
7	30-39 years	_ _	_ _
8	≥40 years	_ _	_ _
9	What is the education level of the participant?	_	0. Too young to go to school. 1. Illiterate (cannot read/cannot write) 2. Uncompleted primary school 3. Completed primary school 4. Uncompleted secondary school 5. Completed secondary school or higher 6. Other, specify: _____ 9. Don't know/don't want to share
10	What is the main occupation of the participant?	_ _	01. Farmer (own the land, rent the land) 02. Agricultural waged labour 03. Herd animals 04. Unemployed (jobless or too old to take job) 05. Going to school/student 06. Water selling and trucking 07. Tea selling and catering 08. Porter 09. Merchant 10. Petty trade 11. Skilled labour (carpenters, construction, welders, driver etc) 12. Salaried work (Public service, MoH, MSF, others) 13. Playing/stay with mother/too young to have a specific occupation 14. Take care of the house 15. Other, specify: _____ 99. Don't know/don't want to share

11	Is the participant the head of the family?	__	0. No 1. Yes
<i>If yes, go to question 15. Otherwise, continue.</i>			
12	What is the sex of the head of the family?	__	1. Male 2. Female
13	What is the education level of the head of the family?	__	Same code as question 10. 6. Other, specify: _____ 9. Don't know/don't want to share
14	What is the main occupation of the head of the family?	__ __	Same code as question 11. 15. Other, specify: _____ 99. Don't know/don't want to share

Part 3 – Movement history

Nr.	Question	Answer	Answer options
15	For how long has the participant lived in his/her current house?	__	1. Since birth 2. Since ≥ 1 year, specify number of years: _____ 9. Don't know/don't want to share
16	Did the participant travel or stay outside the village of residence for >2 weeks over the past year?	__	0. No 1. Yes 9. Don't know/don't want to share
<i>If yes, continue. Otherwise, go to question 24.</i>			
	List the travels of >2 weeks and specify the location, duration and purpose.	Location: 1. Neighbouring village inside the same locality (specify) 2. Other locality in the West Pokot County (specify) 3. Kapenguria 4. Outside West Pokot County (specify) 5. Outside Kenya (specify) 9. Don't know/don't want to share Duration: number of weeks (99. Don't know/don't want to share)	
		Location (if not Kapenguria, specify)	Duration (weeks)
17	Travel 1	__ Specify: _____	__ __

18	Travel 2	__ Specify: _____	__ __
19	Travel 3	__ Specify: _____	__ __
20	Travel 4	__ Specify: _____	__ __
21	Travel 5	__ Specify: _____	__ __
22	Travel 6	__ Specify: _____	__ __

Part 4 - Night activities and sleeping habits

Nr.	Question	Answer		Answer options
		During the dry season	During the rainy season	
23	When does the participant usually go to sleep?	__	__	1. Before sunset 2. At sunset (6h30 PM – 6h50 PM) 3. After sunset 4. Variable from day to day 5. Not relevant, baby/small child 9. Don't know/don't want to share
<i>If the answer is 3., continue with question 24. Otherwise, go to question 26.</i>				
24	Between sunset and going to sleep, where does the participant usually stay?	__	__	1. Indoors 2. Outdoors 3. Both indoors and outdoors 9. Don't know/don't want to share
<i>If the participant only stays indoors (1.), go to question 26. Otherwise, continue.</i>				
25	Between sunset and going to sleep, where is the participant usually located when being outdoors?	__	__	1. House yard 2. In the village 3. Forest 4. Fields 5. Next to the house yard 6. Neighbouring village 7. Near the river 8. Other, specify: _____

				9. Don't know/don't want to share
26	Does the participant usually sleep inside his/her own house?	__	__	0. No 1. Yes 9. Don't know/don't want to share
<i>If yes, continue with question 27 and skip question 28. If no, go to question 28.</i>				
27	When sleeping in his/her own house or yard, where does the participant usually sleep?	__	__	1. In a brick/cement room 2. In a room made of mud 3. Under a shelter 4. In an open space 5. Under a tree 6. Variable 7. Other, specify: _____ 9. Don't know/don't want to share
28	Where does the participant usually sleep instead of his/her own house?	__	__	1. Somewhere else in the village 2. In a neighbouring village 3. In a field 4. In a forest 5. Other, specify: _____ 9. Don't know/don't want to share
29	At night, where does the participant go to the toilet?	__	__	1. Latrine inside or outside the house yard 2. Flush toilet inside the house (yard) 3. At a river/stream 4. At a pool/pond 5. At a tree 6. In a field or open space 7. Not relevant, young child 8. Other. Specify: _____ 9. Don't know/don't want to share

30	How many other persons usually sleep in the same room as the participant? (including the participant himself/herself)	_ _	_ _	Write down number of persons 99. Don't know/don't want to share
31	Does the participant usually go outdoors around the time of sunrise (6h30 AM - 6h45 AM)?	_	_	1. Daily 2. Frequently 3. Sometimes 4. Rarely 5. Never 9. Don't know/don't want to share

Part 5 – Housing characteristics

Nr.	Question	Answer	Answer options
32	What type of walls does the room/house have where the participant usually sleeps?	_	1. Concrete-brick 2. Strong mud (mixed or with a layer of animal dung) with nothing on the outside 3. Strong mud with outside grass or plastic sheeting 4. Cane plastered with mud 5. Grass/cane/wood 6. Metal/zinc 7. Stones 8. Other, specify: _____ 9. Don't know/don't want to share
<i>If the answer is 5. or 6., skip question 33. Otherwise, continue.</i>			
33	Are the walls cracked?	_	0. No 1. Yes 9. Don't know/don't want to share
34	What type of roof does the room/house have where the participant usually sleeps?	_	1. Grass and wood 2. Metallic-zinc 3. Corrugated iron-cement 4. Cane or strong straw 5. Plastic 6. Other, specify: _____ 9. Don't know/don't want to share

35	What type of floor does the room/house have where the participant usually sleeps?	__	1. Black cotton soil (noroyon) 2. Earthen covered with gravel 3. Sandy soil 4. Rock, stone and gravel soil 5. Cemented/concrete 6. Tiles 7. Mixture based from cattle dung 8. Other, specify: _____ 9. Don't know/don't want to share
36	What type of windows does the room/house have where the participant usually sleeps?	__	0. No windows 1. Windows with shutters 2. Windows with screen or curtain 3. Windows without protection 9. Don't know/don't want to share
37	Was the room/house treated with indoor residual spraying in the last year?	__	0. No 1. Yes, by the household 2. Yes, by the Ministry of Health or other organization 9. Don't know/don't want to share

Part 6 - Surroundings

Nr.	Question	Answer		Answer options
		During dry season	During rainy season	
38	Are there usually bodies of open water in the house yard? (if several, report the largest)	__	__	0. No 1. Yes, local sewage 2. Yes, stagnant rain water 3. Yes, water collected in bucket/open container 4. Yes, other, specify: _____ 9. Don't know/don't want to share
39	Is there often compost or other decaying organic material in the house yard?	__	__	0. No 1. Yes 9. Don't know/don't want to share

40	On what type of soil is the house yard located?	__	1. Black cotton soil (noroyon) 2. Earthen covered with gravel 3. Sandy soil 4. Rock, stone and gravel soil 5. Cemented/concrete 6. Loam 7. Clay 8. Other, specify: _____ 9. Don't know/don't want to share
41	Are there trees in the house yard and/or its immediate surroundings?	__	0. No 1. Yes, only in the house yard 2. Yes, only in the immediate surroundings 3. Yes, in the house yard and its immediate surroundings 9. Don't know/don't want to share
<i>If yes, report the type of tree(s). Otherwise, continue to question 51.</i>			
42	Chooh (<i>Acacia seyal</i>)	__	0. Not present 1. Present 9. Don't know/don't want to share
43	Tuyonwo (<i>Balanites aegyptiaca</i>)	__	
44	Rotin (<i>Kigelia africana</i>)	__	
45	Koloswa (<i>Terminalia brownii</i>)	__	
46	Chemangayan (<i>Acacia senegal</i>)	__	
47	Talamo (<i>Acacia mullifera</i>)	__	
48	Neem (<i>Azadirachta indica</i>)	__	
49	Kerelwo (<i>Croton</i>)	__	
50	Other, specify: _____	__	
51	Did the participant cut down trees in the house yard over the past year?	__	0. No 1. Yes 9. Don't know/don't want to share
<i>If yes, report the type of tree(s). Otherwise, continue to question 61.</i>			

52	Chooh (<i>Acacia seyal</i>)	__	0. Not cut down
53	Tuyonwo (<i>Balanites aegyptiaca</i>)	__	1. Cut down
54	Rotin (<i>Kigelia africana</i>)	__	9. Don't know/don't want to share
55	Koloswa (<i>Terminalia brownii</i>)	__	
56	Chemangayan (<i>Acacia senegal</i>)	__	
57	Talamo (<i>Acacia mullifera</i>)	__	
58	Neem (<i>Azadirachta indica</i>)	__	
59	Kerelwo (<i>Croton</i>)	__	
60	Other, specify: _____	__	
61	Are there termite mounds in the house yard or its immediate surroundings?	__	0. No 1. Yes. 9. Don't know/don't want to share
<i>If yes, continue. Otherwise, go to question 63.</i>			
62	How far is the closest termite mound from the house?	__	1. Less than 10 metres distance 2. Between 10 and 100 metres distance 3. More than 100 metres distance 9. Don't know/don't want to share
63	Is there a river at eye range from the house where the participant lives?	__	0. No 1. Yes, less than 10 metres distance 2. Yes, between 10 and 100 metres distance 3. Yes, more than 100 metres distance 9. Don't know/don't want to share
64	Is there a pond or water well at eye range from the house where the participant lives?	__	0. No 1. Yes, less than 10 metres distance 2. Yes, between 10 and 100 metres distance 3. Yes, more than 100 metres distance 9. Don't know/don't want to share
65	Is there irrigated agriculture at eye range from the house where the participant lives?	__	0. No 1. Yes, less than 10 metres distance 2. Yes, between 10 and 100 metres distance 3. Yes, more than 100 metres distance 9. Don't know/don't want to share

Part 7 - Contact with animals

Nr.	Question	Answer		Answer options
		During the dry season	During the rainy season	
66	At night, are there usually husbandry or pet animals in the room where the participant sleeps?	__	__	0. No 1. Yes 9. Don't know/don't want to share
<i>If yes, specify the type and number. Otherwise, go to question 75.</i>				
67	Dogs	__	__	99. Don't know/don't want to share
68	Cats	__	__	
69	Cattle	__	__	
70	Goats	__	__	
71	Sheep	__	__	
72	Poultry	__	__	
73	Donkeys	__	__	
74	Other, specify: _____			
75	Are there usually animals in the yard of this house? (including animals located in animal accommodation)	__	__	0. No 1. Yes 9. Don't know/don't want to share
<i>If yes, specify the type. Otherwise, go to question 85.</i>				
76	Dogs	__	__	0. No 1. Yes 9. Don't know/don't want to share
77	Cats	__	__	
78	Cattle	__	__	
79	Goats	__	__	
80	Sheep	__	__	
81	Poultry	__	__	
82	Donkeys	__	__	
83	Camels	__	__	
84	Other, specify: _____	__	__	
85	Are there animal burrows in the house or the yard of the house where the participant usually sleeps?	__	__	0. No 1. Yes 9. Don't know/don't want to share

Part 8 - Activities around trees, water bodies and termite mounds

Nr.	Question	Answer		Answer options
		During the dry season	During the rainy season	
86	During daytime, does the participant have activities in the wood/forest? (in case of a child, does he/she accompany another person in the forest?)	__	__	1. Daily 2. Frequently 3. Sometimes 4. Rarely 5. Never 9. Don't know/don't want to share
<i>If yes, specify. Otherwise, continue to question 88.</i>				
87	Most frequent activity in woods/forests.	__	__	1. Logging 2. Herding animals 3. Collecting firewood 4. Hunting 5. Collecting plant roots 6. Collecting fruits 7. Other, specify: _____
88	Does the participant have activities in proximity to water bodies? (in case of a child, does he/she accompany another person to bodies of water?)	__	__	1. Yes, daily 2. Yes, weekly 3. Yes, sometimes 4. Yes, but rarely 5. No, never 9. Don't know/don't want to share
89	Does the participant have activities in proximity to termite mounds?	__	__	1. Yes, daily 2. Yes, weekly 3. Yes, sometimes 4. Yes, but rarely 5. No, never 9. Don't know/don't want to share
<i>If yes, specify. Otherwise, continue to question 91.</i>				

90	Most frequent activity in proximity to termite mounds.	_	_	1. Herd animals 2. Farming 3. Collect soil from termite mound 4. (In case of child) play around or on top of termite mound 5. Collect termites as food 6. Other. Specify: <hr/> 9. Don't know/don't want to share
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Part 9 - Mosquito net use

Nr.	Question	Answer		Answer options
		During the dry season	During the rainy season	
91	Does the participant sleep under a mosquito net?	_	_	0. No, never 1. Yes 9. Don't know/don't want to share
<i>If yes, continue. Otherwise, go to question 99.</i>				
92	How frequently does the participant sleep under a mosquito net?	_	_	1. Daily 2. Frequently 3. Sometimes 4. Rarely 5. Never 9. Don't know/don't want to share
93	How did the participant acquire the mosquito net?	_		1. Through the Ministry of Health 2. Through a non-governmental organization 3. Bought at a local store 4. Given by a relative or friend (second-hand) 5. Other, specify: <hr/> 9. Don't know/don't want to share

94	How long has the participant been using the current mosquito net?	__	<ul style="list-style-type: none"> 1. Less than 1 month 2. Less than 3 months 3. Less than 6 months 4. Less than 1 year 5. Around 2 years 6. 3 or more years 9. Don't know/don't want to share
95	Is the current mosquito net impregnated with insecticide?	__	<ul style="list-style-type: none"> 0. No 1. Yes 9. Don't know/don't want to share
<i>If yes, continue. Otherwise, go to question 97.</i>			
96	When was the mosquito net last treated with insecticide?	__	<ul style="list-style-type: none"> 1. Less than 1 month ago 2. Less than 3 months ago 3. Less than 6 months ago 4. Less than 1 year ago 5. Around 2 years ago 6. 3 years ago or more 9. Don't know/don't want to share
97	Is the mosquito net in good condition? (according to the participant's own judgement)	__	<ul style="list-style-type: none"> 1. Yes, in good condition, not damaged 2. Slightly damaged 3. No, in poor condition 9. Don't know/don't want to share
98	Has the mosquito net ever been washed?	__	<ul style="list-style-type: none"> 0. No, never 1. Yes 9. Don't know/don't want to share

Part 10 - Use of insect repellents

Nr.	Question	Answer		Answer options
		During the dry season	During the rainy season	
99	Is the participant applying skin insect repellent to protect himself/herself against insect bites?	_	_	1. Daily 2. Frequently 3. Sometimes 4. Rarely 5. Never 9. Don't know/don't want to share
<i>If yes (regardless of frequency), specify the type(s) of repellent used. Otherwise, go to question 106.</i>				
100 101 102 103 104 105	Chemical repellent Sesame oil Neem oil Ground nut or bean oil Petroleum product Other, specify: _____	_ _ _ _ _ _	_ _ _ _ _ _	0. No 1. Yes 9. Don't know/don't want to share
106	Does the participant use fire or smoking wood or animal dung as an insect repellent in the house/room?	_	_	1. Daily 2. Frequently 3. Sometimes 4. Rarely 5. Never 9. Don't know/don't want to share
<i>If yes, specify what is used. Otherwise, this was the last question.</i>				
107 108 109 110 111	Chooch (<i>A. seyal</i>) Tuyonwo (<i>B. aegyptiaca</i>) Neem (<i>Azadirachta indica</i>) Animal dung Other, specify: _____	_ _ _ _ _	_ _ _ _ _	0. No 1. Yes 9. Don't know/don't want to share

This is the end of the questionnaire

Ending time of the interview (hh:mm)	__ : __
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Date:	Name investigator:	Signature investigator:
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