### **Supplementary Materials**

### Appendix S1. Household enumeration and survey sampling methodology:

The household line listing was created during October-December 2018 through enumeration of all structures in each selected EA with information documented on the number of structures, presence and the number of households within each structure, the number of household members, age and sex of each member. Three attempts were made to enumerate each household. Listing completion in each EA was determined using a threshold of 80%.

A sample size of 400 (200 households in slums and 200 households in non-slums) was determined to be sufficient to capture an expected prevalence of 10% of enrolled children who are not up-to-date on the recommended childhood vaccines in each setting, with a precision of 7% when sampling 29 enumeration areas. A non-response rate of 15% and a design effect of 1.6 was assumed.

Table S1. Household level demographic and socioeconomic characteristics (unweighted), household survey, WAU district, Sierra Leone, 2019

Household level characteristics	Slum (r	n=236)	Non-slun	n (n=207)
	n or (median)	[Range] or %	n or (median)	[Range] or %
Main source of drinking water				
Piped water	178	75	107	52
Dug well	17	7	46	22
Water from spring	1	<1	6	3
Surface water (river/dam)	0	0	5	2
Water tank	3	1	1	<1
Purchase filtered water	38	16	42	20
Location of water source				
In home	11	6	14	8
In own yard/plot	44	22	29	18
Elsewhere	143	72	122	74
<b>Median time to reach water source (minutes)</b>	(15)	[1-180]	30	[1-360]
Type of toilet				
Flush or pour flush toilet	74	31	74	36
Pit latrine	106	45	123	59
Bucket/ hanging toilet/ plastic bags	56	24	10	5
HHs possessing all of the following: electricity, radio, television, mobile phone, and refrigerator	69	29	88	43
HHs possessing all of the following: rudimentary or finished walls, floors, and roof	213	89	207	94

Table S2. Caregiver factors and attitudes associated with utilization of routine immunization comparing slum to non-slum areas (weighted), household survey, Western Area Urban district, Sierra Leone, 2019

Slum (n=2319)   Non-slum (n=210)   %   95% C1   %   95%	stuff to holf-stuff areas (weighted), household survey, western Area				
Transportation time from home to vaccination site			<u> </u>		
Saminutes	Transportation time from home to veccination site	70	93% CI	70	93% CI
Section   Sect	•	52	15.60	50	15 60
Not minutes   Section					
Perception of time to reach usual vaccination site					
About right		0	4-14	9	3-13
A short time	•	25	10.21	24	17.22
Too much time	<u> </u>				
Preferred location of additional vaccination site         Close to home         88         82-92         90         83-94           Close to work Close to work Close to market Relationship         7         4-12         5         3-9           No preference Relation site         3         1-9         5         2-9           Wait time at vaccination site         21         17-25         20         14-29           30 minutes - 1 hour Applies Applies Relationship         39         32-47         35         26-44           >1 hour Applies Applies Applies Applies Relationship         49         39-58         43         35-51           Perception of wait time at vaccination site         About right Applies Ap					
Close to home   R8   R2-92   90   R3-94     Close to work   2   1-5   1   0-2     Close to market   7   4-12   5   3-9     No preference   3   1-9   5   2-9     Wait time at vaccination site		34	24-45	40	32-50
Close to work   2   1-5   1   0-2					
Close to market   7					
No preference   3   1-9   5   2-9					
Valit time at vaccination site					
Solution	No preference	3	1-9	5	2-9
30 minutes - 1 hour	Wait time at vaccination site				
Note	<30 minutes	21	17-25	20	14-29
About right	30 minutes – 1 hour	39	32-47	35	26-44
About right   49   39-58   43   35-51     A short time   37   26-40   35   27-45     Too much time   14   10-19   22   16-29     Payment to healthcare worker	>1 hour	40	32-47	44	37-52
About right   49   39-58   43   35-51     A short time   37   26-40   35   27-45     Too much time   14   10-19   22   16-29     Payment to healthcare worker	Perception of wait time at vaccination site				
A short time   37   26-40   35   27-45     Too much time   14   10-19   22   16-29     Payment to healthcare worker	-	49	39-58	43	35-51
Too much time	<u> </u>	37	26-40	35	27-45
Nothing	Too much time	14	10-19	22	16-29
Nothing					
1,000-5,000 Leones	•	47	36-58	50	41-58
6,000-10,000 Leones         8         5-13         9         6-14           ×10,000 Leones         4         1-8         3         1-7           Knowledge of child in family or community who experienced vaccines side effects within last 12 months         7         4-13         7         4-13           Self-reported refusal of recommended vaccination         6         3-12         2         1-5           Self-reported delays in receiving recommended vaccination         36         26-46         37         28-48           Would vaccinate future child with all recommended vaccines         99         97-100         99         95-100           Attended vaccination site but child did not receive vaccination         13         8-18         10         6-15           Reason for attending but not receiving         N=28         N=23           Not enough children to open a vaccination vial         26         14-43         48         25-72           Vaccines not available         25         12-44         6         1-22           Not a scheduled vaccination day         34         15-59         29         10-61           Other         15         6-33         17         5-45           Wait time was too long, chose not to go through with vaccination or asked to pay or tip for service	Ţ.				
Solition					
Knowledge of child in family or community who experienced vaccine side effects within last 12 months74-1374-13Self-reported refusal of recommended vaccination63-1221-5Self-reported delays in receiving recommended vaccination3626-463728-48Would vaccinate future child with all recommended vaccines9997-1009995-100Attended vaccination site but child did not receive vaccination138-18106-15Reason for attending but not receivingN=28N=23Not enough children to open a vaccination vial2614-434825-72Vaccines not available2512-4461-22Not a scheduled vaccination day3415-592910-61Other156-33175-45Wait time was too long, chose not to go through with vaccination or asked to pay or tip for service0-0-					
Self-reported delays in receiving recommended vaccination3626-463728-48Would vaccinate future child with all recommended vaccines9997-1009995-100Attended vaccination site but child did not receive vaccination138-18106-15Reason for attending but not receivingN=28N=23Not enough children to open a vaccination vial2614-434825-72Vaccines not available2512-4461-22Not a scheduled vaccination day3415-592910-61Other156-33175-45Wait time was too long, chose not to go through with vaccination or asked to pay or tip for service0-0-	Knowledge of child in family or community who experienced			7	
Self-reported delays in receiving recommended vaccination3626-463728-48Would vaccinate future child with all recommended vaccines9997-1009995-100Attended vaccination site but child did not receive vaccination138-18106-15Reason for attending but not receivingN=28N=23Not enough children to open a vaccination vial2614-434825-72Vaccines not available2512-4461-22Not a scheduled vaccination day3415-592910-61Other156-33175-45Wait time was too long, chose not to go through with vaccination or asked to pay or tip for service0-0-	Self-reported refusal of recommended vaccination	6	3-12	2	1-5
Would vaccinate future child with all recommended vaccines9997-1009995-100Attended vaccination site but child did not receive vaccination138-18106-15Reason for attending but not receivingN=28N=23Not enough children to open a vaccination vial2614-434825-72Vaccines not available2512-4461-22Not a scheduled vaccination day3415-592910-61Other156-33175-45Wait time was too long, chose not to go through with vaccination or asked to pay or tip for service0-0-	•	36	26-46	37	28-48
Attended vaccination site but child did not receive vaccination138-18106-15Reason for attending but not receivingN=28N=23Not enough children to open a vaccination vial2614-434825-72Vaccines not available2512-4461-22Not a scheduled vaccination day3415-592910-61Other156-33175-45Wait time was too long, chose not to go through with vaccination or asked to pay or tip for service0-0-	• •				
Reason for attending but not receivingN=28N=23Not enough children to open a vaccination vial2614-434825-72Vaccines not available2512-4461-22Not a scheduled vaccination day3415-592910-61Other156-33175-45Wait time was too long, chose not to go through with vaccination or asked to pay or tip for service0-0-					
Not enough children to open a vaccination vial  Vaccines not available  Vaccin					
Vaccines not available 25 12-44 6 1-22  Not a scheduled vaccination day 34 15-59 29 10-61  Other 15 6-33 17 5-45  Wait time was too long, chose not to go through with vaccination or asked to pay or tip for service 0 - 0 -					
Not a scheduled vaccination day 34 15-59 29 10-61 Other 15 6-33 17 5-45 Wait time was too long, chose not to go through with vaccination or asked to pay or tip for service 0 - 0 -					
Other 15 6-33 17 5-45 Wait time was too long, chose not to go through with vaccination or asked to pay or tip for service 0 - 0					
Wait time was too long, chose not to go through with vaccination or asked to pay or tip for service 0 - 0 -	·				
or asked to pay or tip for service			0-33		3-43
	or asked to pay or tip for service	O	_	0	

<sup>\*</sup>Missing data from two caregivers

Note: No significant differences at p<0.05 level.

Table S2. Caregiver reason for refusal or delay of recommended vaccination (unweighted), household survey, WAU district, Sierra Leone, 2019

Reason for self-reported refusal*	Slum (n=13)	Non slum (n=4)
	n (%)	n (%)
Fear of vaccination side effects	9 (69)	1 (25)
Lack of trust in vaccinator	2 (15)	1 (25)
No particular reason	1 (8)	1 (25)
Lack of trust in vaccine	1 (8)	0 (0)
Fertility concerns	0 (0)	1 (25)
Child or caregiver was ill	1 (8)	0 (0)
Other (e.g., fear of hurting child during vaccination)	1 (8)	0 (0)
Lack of trust in health system, too many vaccinations in one visit,	0 (0)	0 (0)
lack of benefit to vaccine, concerns about cost or religion	0 (0)	0 (0)
Reason for self-reported delay*	<b>Slum</b> (n=83)	Non slum (n=80)
Lack of time to take child	35 (42)	40 (50)
Child or caregiver was sick	16 (19)	12 (15)
Fear of vaccination side effects	11 (13)	5 (6)
Other (e.g., inclement weather or holiday)	6 (8)	9 (11)
Forgot about vaccination	8 (10)	5 (6)
No particular reason	5 (6)	4 (5)
Long distance to get to vaccination site	2 (2)	4 (5)
Lack of funds to pay the tip/token of appreciation	3 (4)	1 (1)
Long waiting time at vaccination site	2 (2)	1 (1)
Negative experiences with healthcare providers	2 (2)	1 (1)
Lack of trust in vaccinator	2(2)	1 (1)
Administering too many vaccines during the same visit	0 (0)	2 (3)
Lack of funds to pay for transportation	2(2)	0 (0)
Lack of trust in vaccine	1 (1)	0 (0)
Misplaced vaccination card	1 (1)	4 (5)
Lack of benefit to vaccinate, lack of trust in health system, religious or fertility concerns	0 (0)	0 (0)

<sup>\*</sup>Categories are not mutually exclusive

Table S4. Caregiver perceptions related to childhood vaccinations comparing slum to non-slum areas and receiving three doses of pentavalent vaccine among children who had a vaccination card at the time of interview (weighted), household survey, Western Area Urban district, Sierra Leone, 2019

Perceptions of vaccination (% very much)*	Slum N=233**	Non-slum N=210	P- value	Received three pentavalent vaccine doses N=309	Did not received three pentavalent vaccine doses N=41	P- value
Vaccines are good for your child	98 (95-99)	100 (98- 100)	0.04	99 (98-100)	100	0.69
Vaccines are safe for your child	91 (86-94)	90 (83-94)	0.86	90 (85-94)	64 (21-92)	0.08
Vaccines protect your child against diseases	95 (81-97)	99 (96-100)	0.04	98 (95-99)	100 (96-100)	0.14
Confident in your ability to take your child for vaccination visit	88 (82-93)	92 (84-96)	0.38	94 (89-97)	64 (21-93)	0.02
Encourage others to get their children vaccinated	67 (61-73)	73 (64-81)	0.25	71 (62-79)	44 (16-77)	0.09
People in your community value childhood vaccination services	74 (66-81)	82 (73-88)	0.15	78 (69-86)	47 (17-79)	0.03
Your spouse, partner or other family member approves of vaccinations	88 (83-92)	94 (88-97)	0.07	95 (91-98)	53 (19-84)	<0.001
Other parents in your community approve of childhood vaccinations	69 (61-76)	77 (68-84)	0.17	76 (67-83)	53 (31-74)	0.01
Trusted leaders in your community approve of childhood vaccinations	75 (68-81)	74 (65-82)	0.84	75 (67-82)	68 (49-82)	0.31
Measles is a health threat for children who are unvaccinated	92 (88-95)	94 (88-97)	0.50	94 (86-98)	94 (80-98)	0.85
Illnesses prevented by vaccinations are severe	90 (86-94)	95 (90-97)	0.06	94 (90-97)	95 (85-98)	0.88

<sup>\*</sup>Comparison is between the "very much" response option and "somewhat", "very little", and "not at all" combined.

<sup>\*\*</sup>Missing data from one caregiver

Table S5 . Vaccination coverage of children ages 12-23 months and characteristics (weighted), household survey, Western Area Urban district, Sierra Leone, 2019

accination coverage	12-23 months old (N=209)	
	% or (mean)	95% CI
Mean age of most recent vaccination in months	11	11-12
Owns vaccination card		
Yes, available	82	75-87
Yes, not seen	11	7-18
No	7	3-15
Vaccination coverage (by card or caregiver recall)		
BCG vaccination	100	100
Penta1	100	100
Received two doses of penta	100	100
Received all three penta doses	100	100
MCV1	82	73-89
$MCV2^{\Psi}$	30	21-39
Received BCG, all penta doses and 2 measles doses <sup>¥</sup>	23	15-33
Received BCG, all penta doses and 2 measles doses by 24 months <sup>¥</sup>	19	14-27
No vaccinations	0	0

Abbreviations: BCG = Bacillus Calmette-Guérin; Penta = pentavalent vaccine (diphtheria-tetanus-pertussis-hepatitis B-*Haemophilus influenzae* type b); MCV1 = measles-containing vaccine, 1<sup>st</sup> dose; MCV2 = measles-containing vaccine, 2<sup>nd</sup> dose

<sup>&</sup>lt;sup>4</sup>Only children ≥15 months were included in the analysis, n=168

# Appendix S2. Household Survey Questionnaire – Urban Needs Assessment

Date	_ /   / _	(dd/mm/yy)
Team ID		
Enumerator ID		
Enumeration area / Cluster		
Household ID		
Infant ID		
Ward	<ol> <li>West I</li> <li>West II</li> <li>West III</li> <li>Central I</li> <li>East I</li> <li>East III</li> <li>East III</li> </ol>	
Number of visits made		
Can data be collected for the household?	☐1. Yes ☐2. No	
1. Outcome of visit	Visit 1	Visit 2
Completed	1	1
No HH member at home/no competent respondent	2	2
Entire HH absent for extended period	3	3
Postponed	4	4
Refused to be interviewed	5	5
Dwelling vacant/address not a dwelling	6	6

Dwelling destroyed	7	7
Dwelling not found	8	8
Deaf/Did not speak a survey language	9	9
No eligible respondents in household	10	10
Interview partially completed	11	11
Entire HH moved out of EA	12	12
Eligible caregiver moved out of EA	13	13
Eligible infant moved out of EA	14	14
Other (specify)	15	15

## START\_TIME (for tablet)

100	Eligibility and Consent		
ID	QUESTION	RESPONSE	NOTES / SKIP PATTERN
101.	How many children 12-36 months of age live in this household for which you are the primary caregiver?		This question is just to confirm that there are indeed eligible children in the household based on the listing
	ONLY enter number of children for which the respondent is the primary caregiver.  (armos pikin dem wae dae between 12 to	Effect 33 if doi: CKilow	If 0 then tablet will show a message to stop and talk to supervisor
	36 month dae na dis pot wae na u dae take care of dem?)		Limit total to 5 eligible children
102.	Write the name of each child age 12-36 months of age in the box to the right.	<ol> <li>Name:</li> <li>Name:</li> <li>Name:</li> <li>Name:</li> </ol>	

Informed	d Consent Statement							
to ask yo provided anonymo interview	Thank you for your time. We are here today representing Sierra Leone Ministry of Health and its partners. We would like to ask you about your experience with immunizations that your child aged 12-36 months has received. The information provided will help the Ministry in improving the country's immunization programme. The information we collect will be anonymous, which means that you and your child/children will not be personally identified with the information. The interview should take 30-45 minutes to conduct. Participation in the survey is voluntary, but I hope you will agree to answer the questions since your views are important.							
103.	Do you consent to participate in the interview?  (u gree for leh we tok?)	☐1. Yes ☐2. No	If NO, thank the person for his/her time and continue to the next household.					
Complete	these questions for ALL children between 12 and 3	6 months old for which this respondent is the	e primary caregiver					
104.	Is the respondent 15 years of age or older? (u don 15 year or u don pass?)	1. Yes 2. No	If NO, thank the respondent for their time and schedule a revisit when an adult will be available and continue to the next household.					
105.	Are you the primary caregiver of this child?  (Na u na d main porsin wae dae take care of dis pikin?)	☐1. Yes ☐2. No <del>-</del>	If NO, thank the respondent for their time and schedule a revisit when primary caregiver will be available and continue to the next household.					

106.	Date of birth of (NAME)	Day (DD)	l  l	
	(wus tem (NAME) bon?)	Month (MM) 99 = don't know	 ,	If there are no other eligible children in household, thank the respondent and continue to the next household.
		Year		
			2016	
			2017	
			2018	
			Don't know	

	T							
	Family and Child Demographic Characteristic	S						
	I would now like to ask you a few questions	I would now like to ask you a few questions about your home.						
	NB: Ask child's name and substitute "this chi	ld" with the name of the child in this section.						
ID	QUESTION	RESPONSE	GO					
			то					
201.	How many people live in this household as							
	primary residents?							
	(armos people dem gbain dae live na dis							
	hos wae na wuna all dae eat na d same							
	pot?)							
	(defined as those who regularly sleep in							
	the household and live there the majority							
	of the past year)							
		··						

202.	What is your relationship to (NAME)?	1. Mother	1→
	(U Na watin to (NAME)?)	2. Father	204
		3. Grandmother	
		4. Grandfather	
		5. Other guardian / caregiver	
		Specify	
203.	Is the mother of (NAME) still living?	1. Yes 2. No	
	((NAME) ein Mama dae alive?)		
204.	How many children did (NAME)'s mother give birth to altogether, including those who died (if any) after birth and those who are no longer living with you?	children	
	(Armos pikin dem (NAME) ein mama don born, weda e don die or e nor dae witam na ya?)		
205.	How many living children does (NAME)'s mother have in total?	children	
	(armos pa den wanya dae alive?)	If don't know, enter 99	
206.	Starting from the oldest child, what birth order is (NAME), including those who have died or are no longer living with you?  (starting from d fors pikin(NAME) na de number armos pikin wae e bon?)	rank	
207.	What is (NAME)'s sex?	1. Female	
	((NAME) Na man or woman?)	2. Male	

208.	Where was (NAME) born?	1. Home	
	(Wusai den bon (NAME)?)	2. Health facility (any type)	
		3. Traditional birth attendant (TBA) site	
		4. Other, specify	
		☐99. Don't know	
209.	How long have you lived in this neighborhood?	years	IF Q203
	(aw long u don tap na dis area?)  If less than 1 year, please include number of months. If more than 1 year, round to the nearest year and put "0" for months.	or if less than 1 year:        months  99 if don't know	= NO, SKIP TO 215
210.	What is (NAME)'s mother's marital status?  ((NAME) e mama marade?)	☐ 1. Married ☐ 2. Living together ☐ 3. Divorced or separated	
		3. Widowed 4. Never married and never lived together	
211.	What is (NAME)'s mother's age?	Years	
	(Armos year (NAME) e mama old?)	99 if don't know	

212.	What is (NAME)'s mother's highest level of	1. Never attended school/no formal education	
	school completed?	2. Attended some primary school	
	(wusai (NAME) e Mama tap pa book learning?)	3. Primary	
		4. Junior secondary	
		5. Senior secondary	
		6. Vocational / tertiary	
		☐7. Higher	
		□88. Don't Know	
213.	What is (NAME)'s mother's religion?	1. Christian	
	(Watin na (NAME) e mama religion?)	2. Muslim	
		3. Traditionalist	
		☐4. None	
		5. Other (specify)	
		□88. Don't Know	
214.	What does (NAME)'s mother do as her	1. Petty trader	
	primary way to earn money?	2. Laborer: Plumber/Carpenter/Electrician/Mechanic/Contractor/Fisher	
	(Watin na de main tin (NAME) e mama dae	man	
	do for get moni?)	3. Private business ( <b>except</b> petty traders)	
		4. Farmer	
		5. Teacher/lecturer/Instructor 6. Public transportation driver (taxi, buses, podapoda)	
		7. Okada/ Keke driver	
		8. Medical or heath professional	
		9. Soldier	
		10. Other government employee ( <b>except</b> soldier)	
		11. NGO	
		13. Unemployed	
		14. Retired	
		15. Other (specify)	
215.	Is the father of (NAME) still living?	88. Don't Know	
Z13.	Is the father of (NAME) still living?	☐ 1. Yes ☐ 2. No	
	((NAME) e papa dae alive?)	,	Q219

216.	What is (NAME)'s father's religion?	1. Christian	
	(Watin na (NAME) e papa religion?)	2. Muslim	
		3. Traditionalist	
		☐4. None	
		5. Other (specify)	
		88. Don't Know	
217.	What is (NAME)'s father's highest level of	1. Never attended school/no formal education	
	school completed?	2. Attended some primary school	
	(wusai (NAME) e Papa tap pa book learning?)	3. Primary	
		4. Junior secondary	
		5. Senior secondary	
		6. Vocational / tertiary	
		☐7. Higher	
		88. Don't know	
218.	What does (NAME)'s father do as his	1. Petty trader	
	primary way to earn money?	2. Laborer: Plumber/Carpenter/Electrician/Mechanic/Contractor/Fisher	
	(Watin na de main tin (NAME) e papa, dae do for get moni?)	man 3. Private business ( <b>except</b> petty traders)	
	do joi get monit)	4. Farmer	
		5. Teacher/lecturer/Instructor 6. Public transportation driver (taxi, buses, podapoda)	
		7. Okada/ Keke driver	
		8. Medical or heath professional	
		9. Soldier 10. Other government employee ( <b>except</b> soldier)	
		11. NGO	
		12. Student	
		13. Unemployed 14. Retired	
		14. Retired 15. Other (specify)	
		88. Don't Know	

219.	Who holds primary responsibility for household chores such as cooking, cleaning, taking care of family members?  (Wudat na d main porsin wae dae take care of d hos woke dem lek for cook,clean en take care of de fambul dem?)	1. Mother of child 2. Father of child 3. Child's grandparent 4. Both mother and father of child 5. Mother and another family member 6. Other relatives 7. Other	
220.	Does someone besides you (neighbor, relative, nanny, etc.) look after/take care	1. Yes 2. No	1 <b>→</b> 2
	of (NAME) for several hours at a time?		2 <b>-&gt;</b> 3
	(Any bodi apart from u lek u neaba or u		01
	orda fambul dem or u nanny kin takecare of (NAME) for boku hours any tem e hol lam?)		
221.	How often does someone besides you look after (NAME) for several hours at a time?	1. Daily	
		2. Weekly	
	(Armos tem dis porsin apart from u kin take care of (NAME)for boku hours any tem e hol	3. Monthly	
	lam?)	4. Less than once a month	
300	Child's Vaccination History		
ID	QUESTION	RESPONSE	GO TO
301	How old was {NAME} in months at their most recent vaccination visit?	months	
	(armos month(NAME) bin ol wae e take d last marklate?)	☐ Don't know	
		☐ Never vaccinated	Q303
	Provide the age in months based on caregiver recall. Do not abstract from the immunization card.		

302	As far as you know, has your child received all of the recommended immunizations up to the current age of the child?  (as far as u no for dis pikin e age, e don take all d marklate wae e suppose for don take ?)	1. Yes 2. No 88. Don't know	
	Provide the answer based on caregiver recall. Do not abstract from the immunization card.		
303	Do you have an immunization card [under 5 card] or a card where (NAME)'s vaccinations are written down?	1. Yes, seen 2. Yes, not seen	1 <b>→</b> 306, 3 <b>→</b> 304
	(u get marklate card (da yellow wan) or sie wusai den mak all de marklate(NAME) don take?)	3. No card	
	If YES, May I see it please? Have the respondent get the immunization card, if available.		
	( If Yes, ar kin see am)		

304	card [yellow documenta for (NAME)  (watin mek da yellow w	a not have an immunization v card] or other tion of immunization history today?  tiday u nor get marklate card, can or orda sie wusai den write marklate dem wae (NAME)	2. Healtl 3. Immu 4. Immu location	n facility ke nization ca	eps the im	munization car imunization ca ir destroyed child/kept at a	rd	If no card available, go to Q400. Otherwise continue to Q306.
	<u>Do not read</u>	<u>responses</u>	88. Don′	t know				
	Ask for the I	main reason and mark ONLY						
For e	Review the health card / immunization card of the infant provided by the mother  For each vaccine, check « Yes » if there is a checkmark or a date for the vaccine and « no » if there is nothing written. Copy the dates. Check tick box if there is a poorly written or missing day/month/year.							
306	(NAME)'s date o	of birth (DOB) recorded on card a. DI	□□/□[ D b. MM	c. YYYY				
307	Type of card(s)  Mark all available.			☐ 1. Child Health Record Book Q309 ☐ 2. Under 5 card ☐ 3. Piece of paper/other documentation				
308	Does the yellow card have designated space to do IPTi doses (new yellow card)?			☐1. Yes ☐2. No				
	Vaccine	a. Vaccine received		b. Day	c. Month	d. Year	e. Date po written or day/mont	r missing
309	BCG	☐1. Yes ☐2. No						

		Г., .,		
310	Pentavalent	☐1. Yes		
	(1)			
	DTP/Hib/HepB	2. No		
	В 11 / 11110/11СРВ			
0.1.1	5			
311	Pentavalent	1. Yes		
	(2)			
	DTP/Hib/HepB	2. No		
	, , ,			
212	IDT: 1 /o+ 10	□1 Ves		
312	IPTi 1 (at 10	1. Yes		
	weeks)			
		2. No		
		☐3. Not recorded/unknown		
313	Pentavalent	1. Yes		
313				
	(3)			
		☐2. No		
	DTP/Hib/HepB			
314	IPTi 2 (at 14	☐1. Yes		
	weeks)			
	Weeksy	2. No		
		3. Not recorded/unknown		
		3. Not recorded, anknown		
315	Measles (1)	1. Yes		
		☐2. No		
316	IPTi 3 (at 9	1. Yes		
510	months)			
	11101111115)	2. No		
		∟J∠. NU		
		3. Not recorded/unknown		

317	7 Measles (2) 1. Yes						L		
			☐2. No						
318	la a a a ti	a: al a						Г	
318	Insection treated		1. Yes					L	
	bednet		2. Info not recorded						
	receive								
319	Photo	of immun	nization dates from immunizatior	n card	l .	l .	1		
	-		ne vaccination dates on the immu	inization car	d. DO NOT	capture <i>Ch</i>	nild Health Card	l Personal	
	Inform		our photo.						
400		Recall o	f Child's Vaccination History						
		Only wh	en vaccination card not available	٥					
		Omy Wii	en vacemation card not available	_					
		Otherwi	ise if card available and vaccinati	ion dates ext	tracted, the	en go to 🗦	• Q407		
ID		QUESTIC	ON	RESPONSE					GO TO
401		Has the	child ever received an	1. Yes				<del>-</del>	Q402
			n in the right upper arm or						,
		shoulde	r that usually causes a scar? –	2. No				<del>-</del>	Q403
		that is, I	BCG vaccination (against		. 1				0.400
			losis). This is usually given at	[]3. Don'i	t know			→	Q403
			very shortly after.						
			n ever chuke u pikin up e right						
			shoulder wae e kin lef mark hat na BCG marklate against						
		-	d fos marklate wae den dae gee						
		-	den bon am)						
402		If the ch	illd is present, check for	1: Scar	Present				
		evidenc	e of a scar and record		car Present				
					not availal				
403			child ever received an	1. Yes				→	Q404
		=	n on the left thigh? – that is a	 					Q405
			one vaccination (pentavalent) ent him/her from getting	2.110 ==				<b>,</b>	Q403
		•	, whooping cough, diphtheria,	☐3. Don't	t know			<del>-</del>	Q405
			a & hepatitis. <b>It is usually given</b>						
			hild at 6 weeks, 10 weeks, and						
			cs of age.						
			n ever chuke u pikin up  e left						
		•	at na da five in wan marklate						
			e hep pikin for leh e nor get						
		tetanus,	kof en orda sik dem )						

404	How many times did the child receive pentavalent vaccine on the left thigh?  (Armos tem dis pikin don take da five in wan marklate na e left leg?)  Has the child ever received an injection on the upper arm? that is	Number of times:  Enter 99 if don't remember / unsure  ☐ 1. Yes	Q406
	measles injection at the age of 9 months or older - to prevent him/her from getting measles (den don ever chuke u pikin up e hand da measle injection wae den dae gee am wae e 9 month for mek e nor go get measles ?)		Q407 Q407
406	How many times was measles vaccine given at a routine immunization session?  (armos tem den gee am mealse marklate d tem dem wae u bi dea kerr am go for marklate?)	Number of times:	
407	Has (NAME) ever taken the new medication that helps prevent him/her from getting malaria?  ((NAME) be don ever take da new meresin wae go hep am for mek e nor get malaria?)	1. Yes 2. No 3. Don't Know	If 2,3→ 500
408	How many times was (NAME) given the new medication to prevent him/her from getting malaria?  Armos tem (NAME) don take da new meresin wae go hep am for mek e nor get malaria?	<ul><li>☐ 1. One</li><li>☐ 2. Two</li><li>☐ 3. Three</li><li>☐ 4. More than Three</li><li>☐ 5. Don't Know</li></ul>	

409	Approximately how long did you have to wait at the health facility to receive the medication that prevents malaria in infants?  (Lek how long u get for wait na d hospitul or clinic for get d meresin wae dae make pikin dem nor get malaria?)	1. Less than 30 minutes  2. Between 30 minutes and 1 hour  3. Over 1 hour  77. Unsure of time	
410	Did (NAME) have any reactions after taking the new medication helping to prevent him/her from getting malaria? (any tin be happen to (NAME) after wae e take da meresin wae dae hep am for mek e nor get malaria?)	☐1. Yes ☐2. No ☐3. Don't Know	If 2,3, 99→ 501
411	What kind of reaction(s) did {NAME} have? (Wus kin tin dem happen to ram?)  Mark all that apply	□ 1. Skin rash   □ 2. Vomiting   □ 3. Diarrhea   □ 4. Fever   □ 5. Other   (SPECIFY)	
412	How long did this reaction last after (NAME) took the medication? (aw long dis tin ya bin last for after (NAME) don take dis new malaria Meresin?)  If more than one reaction, enter the number of days for the reaction that lasted the longest period of time	NUMBER OF DAYS  Enter 88 if don't know  Enter 99 if declined to answer	
413	Did you see a health care provider about the reactions (NAME) had after taking the new malaria prevention medication?  (u bi go meet welbodi woke man bot d tin dem way happen to (NAME) after wae e take da new meresin wae dae mek porsin nor get Malaria?)	☐1. Yes ☐2. No ☐3. Don't Know	

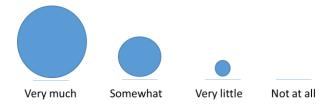
500	O Availability and Accessibility of Childhood Vaccination Services				
ID	QUESTION	RESPONSE	GO TO		
501	Where did (NAME) receive their most recent immunization? (wusai (NAME) get e last Marklate?)	1. Public / Government 2. Private (non-NGO) 3. NGO			
		<ul><li>☐ 4. Mission</li><li>☐ 5. At home during outreach&gt;</li></ul>	Q503		
		6. School>	Q503		
		7. N/A: Child never vaccinated	Q510 Interviewer		
		88. Don't know / don't remember>	should show facility list to help elicit response		
502	What was the name of the health facility where (NAME) receive their most recent immunization?  (watin na d name of d hospital or clinic wae (NAME) take e last marklate?)	Dropdown list of ALL health facilities, organized by type (categories above). Include option for "other, specified", "Don't know" and "outside of Western Area Urban"			
503	Has (NAME) always gone for routine immunization at the same site?  ((NAME) kin always go for ein marklate dem na de same sie?)	☐ 1. Yes> ☐ 2. No ☐ 99. Don't know>	Q505 Q505		

504	What is the main reason why you did not go to the same site?	1. Family moved 2. Site (health facility or outreach) closed or moved	
	(watin na d main tin wae make u nor go na d same sie?)	3. Availability of vaccine	
		4. Instructed by health care worker	
	Do not read responses	5. Convenience of location	
		6. Other personal preference	
	Ask for the main reason and mark ONLY	7. Too expensive (facility charges too much)	
	ONE	8. Lack of funds for transport	
		9. Other	
505	Approximately, how long from home does it take to get to your usual vaccination site	1. Less than 30 minutes	
	using your usual type of transportation? (lek how long e go take u for komot na hos en go na d sie wae den dae gee marklate if u use d way u kin go dae?)	2. Between 30 minutes and 1 hour	
		3. Over 1 hour	
		☐77. Unsure of time	Q507
		■88. Unsure of location of vaccination site	Q507
506	How do you view the time of the world whole	1. To a couple time a	
300	How do you view the time it usually takes to reach your usual vaccination site?  (how u see da tem wae u kin take for go na d sie way u kin go for marklate?)	1. Too much time 2. About right 3. A short time	
507	Once you are at the vaccination site,	1. Less than 30 minutes	
	approximately how long does it usually take to get (NAME) vaccinated at the site?	2. Between 30 minutes and 1 hour	
	(wae u don reach na d sie wae den dae gee marklate,how long e kin take for mek den gee (NAME) Marklate?)	3. Over 1 hour	
			Q509

508	How do you view the time it usually takes to get your child vaccinated once you arrive at the vaccination site?  (wae u don reach na d sie wae den dae gee marklate,how u see da tem wae e kin take for mek den gee u pikin Marklate?)	☐ 1. Too much time ☐ 2. About right ☐ 3. A short time	
509	How much are you usually expected to give to healthcare workers during a vaccination visit?  (armos u feel say u for gee welbodi woke man dem, d tem wae u kerr u pikin for marklate?)	<ul> <li>☐ 1. Nothing</li> <li>☐ 2. 1,000-5,000 Leones</li> <li>☐ 3. 6,000-10,000 Leones</li> <li>☐ 4. &gt;10,000 Leones</li> <li>☐ 5. Non-monetary gift</li> </ul>	
	Probe to understand payments or gifts that are not required but expected.	88. Don't remember / unsure	
510	Have you ever taken any of your children for vaccination and come home without receiving the vaccination?  (u don ever kerr any of u pikin dem for marklate en u return back without den nor gee am Marklate?)		Q511 Q601 Q601
511	What was the main reason any of your children did not receive vaccination the last time that happened (referring to Q510)? (watin nad main reason wae den nor gee any wan pa u pikin dem marklate de last tem way u kerram go?)	1. Vaccines were not available 2. Was not a scheduled vaccination day 3. The wait was too long 4. I was asked to pay for service or related materials 5. I was asked to provide a tip/token of appreciation 6. I chose not to go through with vaccination 7. Not enough children to open a vaccination vial at that time 8. Other (specify:)	

The next several questions are about your opinion on vaccination. For every question that I ask, please look at this figure. The biggest circle means "very much", the second circle means "somewhat", the small circle means "very little" and no circle means "not at all". Please point to the circle that relates to how much you feel about every question.

(D Next question dem wae ar dae kam ask,na watin u think bot vaccination.any question wae ar ask du ya ,luk pa dis picture. De big circle mean Boku Boku wan ,de second circle mean,haf en haf,de small circle mean small ,en d sie wae u nor dae see circle mean,Natin . Duya point pa d circle u tink sae feba u answer)



600	Vaccination Acceptance and Demand		
ID	QUESTION	RESPONSE	GO TO
601	How much do you think that vaccines are good for your child?  (armos u tink say marklate good for u pikin?)	1. Very much 2. Somewhat 3. Very little 4. Not at all  99. Declined to answer	
	Note: Point to the visual scale, and ask which one of the circles represent how much he/she thinks vaccines are good		
	(Lek dis much, or dis much, or dat much? Ose wan wae dae show armos u think say marklet good)		
602	How much do you think that vaccines are safe for your child?  (Armos u tink say marklet na tin wae safe for u pikin?	1. Very much 2. Somewhat 3. Very little 4. Not at all	
603	How much do you think that vaccines protect your child against diseases?  (armos u think say marklate dae hep u pikin for mek e nor get sik dem?)	1. Very much 2. Somewhat 3. Very little 4. Not at all	
604	How much do you feel confident in your ability to take your child for scheduled vaccination visits?  (Armos u feel say u go always able for take you pikin for all e maklate dem wae di tem reach?)	1. Very much 2. Somewhat 3. Very little 4. Not at all	
605	How much would you encourage others to get their children vaccinated?  (armos u able encourage orda combra dem for take dem pikin go for marklate?)	1. Very much 2. Somewhat 3. Very little 4. Not at all 99. Declined to answer	

606	How much do people in your community value childhood vaccination services?  (Armos u tink say pipul dem na u area really see say e impotant for marklate pikin dem?)	<ul> <li>□ 1. Very much</li> <li>□ 2. Somewhat</li> <li>□ 3. Very little</li> <li>□ 4. Not at all</li> <li>□ 99. Declined to answer</li> </ul>	
607	How much does your spouse, partner, or other family members in your household approve of childhood vaccination?  (Armos u tink say u man (uman) or other family member dem na di same pot go gree for gee pikin marklate?)	☐ 1. Very much ☐ 2. Somewhat ☐ 3. Very little ☐ 4. Not at all ☐ 99. Declined to answer	
608	How much do other parents in your community approve of childhood vaccination?  (Armos u tink say orda combra dem na u area go gree for gee pikin marklate?)	1. Very much 2. Somewhat 3. Very little 4. Not at all	
609	How much do trusted leaders in your community approve of childhood vaccination?  (Armos u think say d leaders dem (or big wan dem) wae pipul kin listen to na una area, kin da gree for make pikin dem take marklate?)	<ul> <li>□ 1. Very much</li> <li>□ 2. Somewhat</li> <li>□ 3. Very little</li> <li>□ 4. Not at all</li> <li>□ 99. Declined to answer</li> </ul>	
610	How much does your religion influence vaccination decisions for your child?  (Armos u tink say u religion kin dae affect u decision for take the pikin go for marklate?)	<ul> <li>□ 1. Very much</li> <li>□ 2. Somewhat</li> <li>□ 3. Very little</li> <li>□ 4. Not at all</li> <li>□ 99. Declined to answer</li> </ul>	

611	How much of a health threat do you think measles is for children who are unvaccinated?  (Armos u tink say measles go hamgborg pikin ein wellbodi wan wae nor take marklate?)	1. Very much 2. Somewhat 3. Very little 4. Not at all 99. Declined to answer	
612	How much would you say childhood vaccination goes together with your religious beliefs?  (armos u tink u religion gree for pikin marklate?)	1. Very much 2. Somewhat 3. Very little 4. Not at all	
613	How much do you think the illnesses which vaccination prevent are severe?  (Armos u tink say small-pikin sickness dem (lek measles and polio) go cause serious problem for pikin dem?)	1. Very much 2. Somewhat 3. Very little 4. Not at all	

For next set of questions (700-717) you may say "yes" "unsure" or "no" to tell us about your observations and experiences with childhood vaccination.

700	Vaccination Experiences and Behaviors		
ID	QUESTION	RESPONSE	GO TO
701	Do you know of any child in your family or community that has experienced vaccine side effects in the last year?  (u sabie any pikin na u family or na u area wae marklate don hamborg insie dis pass one year?)	1. Yes	Q702 Q703 Q703
702	How serious was the vaccine side effect?  (how dis tin ya be muna ram?)	1. Not at all serious 2. A little serious 3. Somewhat serious 4. Very serious 99. Declined to answer	

703	Have you ever refused getting a recommended vaccine for your child? By refused, I mean, have you ever turned down vaccination services or chosen not to have your child vaccinated?  (u don ever deny marklate way u pikin for get?)	1. Yes	Q704 Q705 Q705 Q705
704	What was the reason for refusing the recommended vaccine(s) for your child?  (for wus reason wae mek u deny marklate way u pikin for get?)  (multiple selections allowed; do not read)  PROBE: Any other reasons?	1. Lack of trust in vaccine 2. Lack of trust in vaccinator 3. Lack of trust in health system 4. Administering too many vaccines in the same visit 5. Fear of vaccination side effects or past experience with vaccination side effects 6. Concerns about cost 7. Religious concerns 8. Fertility concerns 9. Lack of benefit to vaccinate 10. Negative experiences with healthcare providers 11. Other (specify) 12. No particular reasons	
705	Have you ever delayed getting a recommended vaccine for your child?  (u don ever miss d tem for u pikin for take marklate?)	□ 1. Yes	Q706 Q707 Q707
			Q707

What was the reason or barriers for delaying the recommended vaccine(s) for your child?  (watin na d tin dem wae mek ,u miss d tem wae u pikin for take marklate?)  1. Lack of trust in vaccine  2. Lack of trust in health system  4. Administering too many vaccines in the same visit  5. Fear of vaccination side effects or past experience with side effects  6. Long waiting time at vaccination site  7. Long distance to get to vaccination site	
for your child?  3. Lack of trust in health system  4. Administering too many vaccines in the same visit  5. Fear of vaccination side effects or past experience with side effects  6. Long waiting time at vaccination site	
4. Administering too many vaccines in the same visit  (watin na d tin dem wae mek ,u miss d  tem wae u pikin for take marklate?)  4. Administering too many vaccines in the same visit  5. Fear of vaccination side effects or past experience with side effects  6. Long waiting time at vaccination site	
(watin na d tin dem wae mek ,u miss d tem wae u pikin for take marklate?)  5. Fear of vaccination side effects or past experience with side effects  6. Long waiting time at vaccination site	
tem wae u pikin for take marklate?)  with side effects  6. Long waiting time at vaccination site	
6. Long waiting time at vaccination site	
7 Long distance to get to vaccination site	
7. Long distance to get to vaccination site	
8. Lack of time to take the child (working, travel,	
(multiple selections allowed; do not other priorities)	
read) 9. Lack of funds to pay for transportation	
10. Lack of funds to pay the tip/token of appreciation	
for providers	
PROBE: Any other reasons?	
12. Fertility concerns	
13. Lack of benefit to vaccinate	
14. Negative experiences with healthcare providers	
15. Other (specify)	
16. No particular reasons	
88. Don't remember why	
99. Declined to answer	
707 If you have another child in the future, \ \Boxedox 1. Yes	
do you plan to accept ALL	
recommended vaccinations for	
him/her?	
99. Declined to answer	
(if u get orda pikin tumara,u go plan for	
leh e get ol d marklate wae e suppose	
for get?)	
Joi getti)	

For the next set of questions (801-811) we would like to learn more about your social support, trusted information sources, and preferred ways of getting information about childhood vaccination services.

(Next question dem we go lek for no bot aw u dae get ep from pipul dem,de sai dem wae u belif for get information,en d way dem wae u dae get information bot u pikin marklate wan)

800	Social support, trusted information sources and preferred communication channels		
ID	QUESTION	RESPONSE	GO TO
801	The last time (NAME) was vaccinated, who took him/her to the vaccination site?	1. Mother 2. Father	

	(de last tem wae den marklate d	3. Grandmother	
	pikin,na wudat bi kerr am go d sie wae den bi marklate tam?)	4. Grandfather	
		5. Sibling	
	(Multiple selection allowed; do not	6. Other relative (specify)	
	read)	7. Other non-relative (specify)	
		66. Vaccinated at home during outreach 77. Child has never been vaccinated 88. Don't remember / unsure 99. Declined to answer	
802	Through which means do you <u>usually</u>	1. Household visits	
	receive information about childhood vaccination?	2. Community-based events	
	(wus way u dae get information more	3. Radio programming	
	bot pikin marklate ?)	4. Television programming	
		5. Social media (e.g. Facebook)	
	(Read all, and ask to select one)	6. Mosque / church	
		☐7. Health facility (any type)	
		8. Pharmacy	
		9. Text messages	
		10. Voice messaging (on mobile phones)	
		11. Other (specify)	
		77. I don't receive information from any of these sources 88. Don't know / unsure 99. Declined to answer	
803	Which of the following means do you prefer the most to receive information	1. Household visits	
	about childhood vaccination?	2. Community-based events	
		3. Radio programming	
		4. Television programming	

	(pa deh wan ya ,ar dae cam read na	5. Social media (e.g. Facebook)
	,wus wan u go lek for dae get	
	information bot pikin marklate)	6. Mosque / church
		7. Health facility (any type)
	(Read all, and ask to select one)	8. Pharmacy
		9. Text messages
		10. Voice messaging (on mobile phones)
		11. Other (specify)
		77
		77. I don't have a preference 88. Don't know / unsure
		99. Declined to answer
804	Who do you trust the most to talk to	1. Spouse
	you about childhood vaccination?	2. Child's grandparents
	(wudat u belief more for tok to bot pikin marklate?)	3. Other relatives
		4. Friends and neighbors
	(Select up to three choices)	5. Other parents and caregivers
		6. Community leader (e.g. chief, village leader)
		7. Faith leader
		8. Traditional birth attendant (TBA)
		9. Traditional healer
		10. Community health worker
		11. Health provider (e.g. nurse, doctor, vaccinator)
		12. Pharmacist
		13. Other (specify)
		77. I don't trust anyone 88. Don't know / unsure 99. Declined to answer

If you could add an additional vaccination site, where would you like it to be?  READ ALL ANSWERS. SELECT ONE.	1. Close to home 2. Close to work 3. Close to the market 4. No preference	
(if u go want for mek dem add one more sai for take maklate, usai u go want mek e dae?)	99. Declined to answer	
Near you ose, or near you wok place or near di markit		
•		haf and d
omewhat Not at all		
How important is it to you that vaccination services are offered on weekends/evenings?  (aw important e be to u for leh den dae gee marklate de weekend or eventem?)	1. Very important 2. Somewhat important 3. Not at all important 4. Don't Know	
Bednet use I will now ask you some questions about	malaria and malaria prevention	
QUESTION	RESPONSE	GO TO
Are insecticide-treated mosquito nets provided during routine vaccination visits at your local vaccination site?  (De sie wae wuna kin go for marklate wae dae near wuna.den kin gee	1. Yes 2. No 3. Don't Know	
	vaccination site, where would you like it to be?  READ ALL ANSWERS. SELECT ONE.  (if u go want for mek dem add one more sai for take maklate, usai u go want mek e dae?)  Near you ose, or near you wok place or near di markit  destion, please look at this figure. The biggest on o circle means "not at all important". Please stion, ar wan mek u look den round tin dem you e nor important at ol, point to d wan wae u this vaccination services are offered on weekends/evenings?  (aw important e be to u for leh den dae gee marklate de weekend or eventem?)  Bednet use  I will now ask you some questions about QUESTION  Are insecticide-treated mosquito nets provided during routine vaccination visits at your local vaccination site?	vaccination site, where would you like it to be?  READ ALL ANSWERS. SELECT ONE.  (if u go want for mek dem add one more sai for take maklate, usal u go want mek e dae?)  Near you ose, or near you wok place or near di markit  iestion, please look at this figure. The biggest circle means "very important", the second circle means "somew no circle means "not at all important". Please point to the circle that relates to how much you feel about ever no circle means "not at all important". Please point to the circle that relates to how much you feel about ever no circle means "not at all important". Please point to the circle that relates to how much you feel about ever no circle means "somew no circle means "not at all important". Please point to the circle that relates to how much you feel about ever no circle means "somew no circle means "som

	mosquito net way get meresin wae combra dem kin go for marklate?)	99. Declined to answer	
902	Does your household have an	1. Yes	2 <b>→</b> 1001
	insecticide-treated mosquito net?	2. No	
	(wuna get tent wae get meresin pa nam na dis hos/pot? )	99. Declined to answer	99 <b>→</b> 1001
902a	How many insecticide-treated	NUMBER OF NETS	
	mosquito nets does your household have?		
	(armos tent wuna get ?)		
		Enter 88 if don't know	
		Enter 99 if declined to answer	
902b	How many insecticide-treated	NUMBER OF NETS	
	mosquito nets are hanging in your household?		
	(armos pa d tent dem wae u get heng		
	?)	Enter 88 if don't know	
		Enter 99 if declined to answer	
903	Where did you get your most recent	1. Routine vaccination visit	2,3,4,5 <del>&gt;</del>
	treated mosquito net from?  (wusai u get d maskita tent wae u get	2. Malaria bednet distribution campaign	906
	?)	3. From a community health worker	
		4. From a neighbor or friend	
		☐5. Purchased one	
		6. Antenatal care	
		☐7. Other	
		8. Don't know	
904	During a routine vaccination visit, do	1. Yes	
	you ever recall receiving mosquito net education on <u>how</u> to use it?	2. No	

	(da tem wae den bi gee u da maskita tent den bi tell u how for use am?)	3. Don't Know  99. Declined to answer	
905	During a routine vaccination visit, do you ever recall receiving mosquito net education on why to use it?	1. Yes 2. No 3. Don't Know	
	(da tem wae den bi gee u da maskita tent den bi tell u why for use am?)	99. Declined to answer	
906	Did (NAME) sleep under a treated mosquito net last night?	☐1. Yes ☐2. No	1,3 <del>&gt;</del> 1001
	((NAME) bin sleep pa maskita tent last net?)	3. Don't Know  99. Declined to answer	1001
907	Could you please share why (NAME) did not sleep inside a treated mosquito net last night? (u able tell mi, why u nor sleep pa maskita tent last net?)	<ul> <li>☐ 1. Not worried about Malaria</li> <li>☐ 2. Do not own net</li> <li>☐ 3. Net used for bathing/fishing/other use</li> <li>☐ 4. Did not know infant should sleep under a net</li> <li>☐ 5. Nets are not effective at preventing malaria</li> <li>☐ 6. Neighbors don't use mosquito nets</li> <li>☐ 7. It is too hot under the mosquito nets</li> <li>☐ 8. Nets are used mostly by adults in the household</li> <li>☐ 9. Other; (SPECIFY)</li></ul>	
1000	DWELLING CHARACTERISTICS		
ID	QUESTION	RESPONSE	GO TO

1000	DWELLING CHARACTERISTICS		
ID	QUESTION	RESPONSE	GO TO
1001	What is the main source of drinking water for members of your	1. Piped water	
	household?	2. Dug well	
		3. Water from spring	

	(wusai na d main sie wae u dae get	4. Surface water (river/dam)	
	wata for drink?)	☐5. Water tank	
		☐6. Purchase filtered water→	Q1004
1002	Where is that water source located?	☐1. In own home	Q1004
	(wusai wuna kin get wata dae?	□2. In own yard/plot <del>-</del>	Q1004
		3. Elsewhere	
1003	How long does it take to go there, get water, and come back?	Minutes	
	(armos for take for go get wata en cam back?)	Don't know	
1004	What kind of toilet facility do	1. Flush or pour flush toilet	
	members of your household	2. Pit latrine	
	usually use?	☐3. Bucket/hanging toilet/plastic bags	
	(wus kin toilet wae wuna dae use all		
	tem?)		
1005	What type of fuel does your household mainly use for cooking?	1. Electricity	
		☐2. Log	
	(watin wuna dae use for cook?)	3. Natural gas	
		4. Biogas	
		5. Kerosene	
		6. Charcoal	
		7. Wood	
		8. Straw/shrubs/grass	
		9. Agricultural crop	
		☐10. Animal dung	
		☐11 No food cooked	

		12. Other	
1006	Does your household have:		
	Electricity? (wuna ose get light?)	☐1. Yes ☐1. No	
	A Radio? ( <i>Radio</i> )	2. Yes2. No	
	A television? (Television?)	☐3. Yes ☐3. No	
	A mobile telephone? (mobilefone?)	☐4. Yes ☐4. No	
	A land line telephone? (telefone?)	5. Yes5. No	
	A refrigerator? (freezer?)	☐6. Yes ☐6. No	
1007	Main material of the floor	1. Natural floor (ex. earth, sand, dung)	
		2. Rudimentary floor (ex. bamboo, wood planks)	
	ENUMERATOR: OBSERVE (DO NOT ASK)	3. Finished floor (ex. cement, carpet, wood, tiles)	
1008	Main material of the roof	1. Natural roofing (ex. thatch, palm, sod)	
		2. Rudimentary roofing (ex. bamboo, wood planks)	
	ENUMERATOR: OBSERVE (DO NOT ASK)	3. Finished roofing (ex. cement, shingles, wood, corrugated iron)	
1009	Main material of exterior walls	1. Natural walls (ex. no walls, cane, palm, dirt)	
	DECORD ORCEDVATION	2. Rudimentary walls (ex. bamboo, mud, plywood, corrugated iron)	
	RECORD OBSERVATION	3. Finished walls (ex. cement, stone, brick, wood)	
1010	GPS		
Comment	s: Please add any additional comments or o	observations about the interview.	

#### END:

Thank you for sharing your experiences and opinions relating to childhood vaccination in your community. The information you provided is valuable, and will help the Sierra Leone Ministry of Health and Sanitation improve childhood vaccination services.

Do you have any questions for me before we end the interview?

- If YES----- → Answer question(s)
  - o if you don't know the answer or feel uncomfortable providing an answer, you should feel free to say so...then ask the respondent to visit the nearest health facility to get more information
- If NO----- → END