

Iraq Polio Campaign May 2014

Intra-campaign monitoring



World Health
Organization



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KEY RESULTS

7,289

households surveyed in 59 priority districts

3

districts with unacceptable coverage

406

population areas (one or more households) missed

IRAQ POLIO INTRA-CAMPAIGN MONITORING

Following the April 2014 national polio campaign in Iraq, the WHO Iraq country office and Ministry of Health produced household-level risk maps and ranked priority districts to monitor during the May 2014 polio campaign.

59 districts in 19 provinces were surveyed during intra-campaign monitoring for the May 2014 national polio campaign in Iraq. 120 surveyors worked over four days to survey a total of 10,758 children under five and 7,289 households.

The results of intra-campaign monitoring are presented in this report, as well as conclusions and recommendations to inform future rounds of polio immunisation in Iraq.

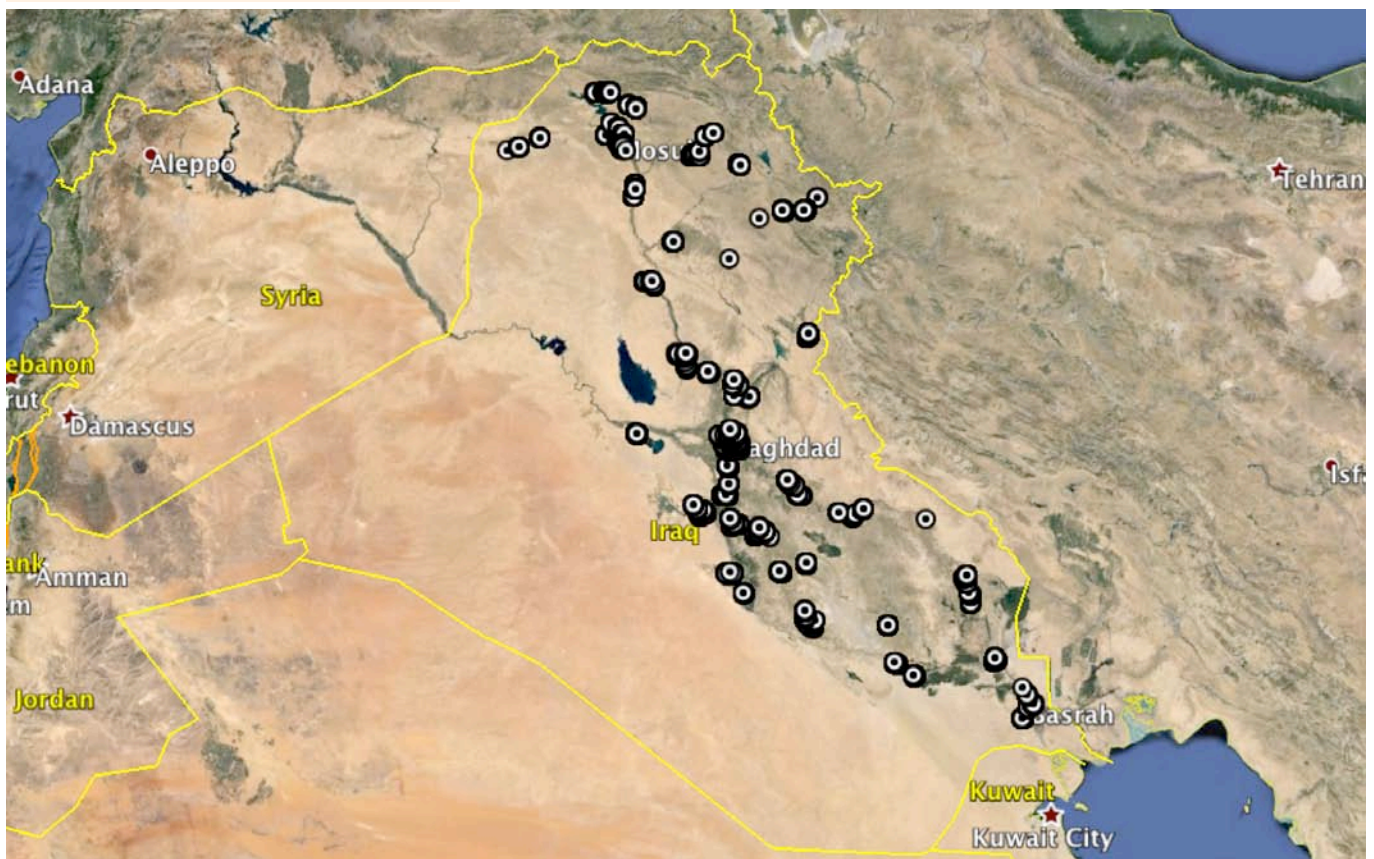


Figure 1. Map showing the locations of households surveyed during intra-campaign monitoring in Iraq.

METHODS



TEAMS
60



HOUSEHOLDS SURVEYED
7,289



CHILDREN U5 SURVEYED
10,758

Data Collection

60 teams (of two surveyors) were trained in the use and application of mobile information technology for polio intra-campaign monitoring. The first stage of sampling (selection of clusters) was performed prior to training during which time a list of priority districts was produced and ranked based on campaign coverage, awareness and routine immunisation coverage from the previous round (Table 1). Teams were allocated respective clusters during training and were responsible for the second stage of sampling (selection of households) using simple random sampling.

Each team surveyed 30 households each day and worked in one cluster over four days, surveying a different area within the cluster on each survey day. A total of 60 clusters, 7,289 households and 10,758 children under five were surveyed across 59 priority districts and 19 provinces. Standard questions were used in the household survey. A paper version was completed if electronic data entry was not feasible within any household and entered electronically afterwards.

Mobile information technology

Data were entered electronically using mobile information technology and GPS co-ordinates of each household recorded. Data were uploaded in real-time to a central server for data analysis and reporting. Mobile information technology enabled standardised, coded data to be collected, analysed and reported in real-time, and has the potential to inform polio planning and programming at different levels of decision-making, from district to national level and beyond.

Statistical analysis

Data were downloaded from the server and restructured according to the number of children under five residing in each household. Associations between variables were considered significant at p -value < 0.05 in univariable analysis. Odds Ratios, with associated 95% confidence intervals and p -values, are presented where appropriate.

Rank	Province	District
1	Baghdad-Karkh	Alaamal
2	Basrah	Shatt Al-Arab
3	Kerbala	Kerbala
4	Muthanna	Al-Rumaitha
5	Muthanna	Warka
6	Sulaymaniyah	Sulaymaniyah
7	Thi-Qar	Suq Al-Shoyokh
8	Wassit	Kut1
9	Basrah	Al-Zubair
10	Anbar	Heet
11	Anbar	Ramadi 2
12	Babylon	Al-Musayab
13	Babylon	Hashimiya
14	Babylon	Hilla 2
15	Baghdad-Karkh	Alealaam
16	Baghdad-Karkh	Kadhmiya
17	Baghdad-Karkh	Mahmudia
18	Baghdad-Karkh	Karkh
19	Baghdad-Resafa	Al Resafa
20	Baghdad-Resafa	Alaadhamia
21	Baghdad-Resafa	Baladiat
22	Baghdad-Resafa	Sadder City
23	Baghdad-Resafa	Sha'b
24	Basrah	Al-Qurna
25	Diwaniya	Afaq
26	Duhok	Duhok
27	Erbil	Dashte Hawler
28	Kerbala	Al Hur
29	Najaf	Mishkab
30	Najaf	South Najaf
31	Ninewa	Aymen
32	Ninewa	Gayara
33	Salah Al-Din	Biji
34	Sulaymaniyah	Bazian
35	Sulaymaniyah	Darbandekhan
36	Thi-Qar	Nassriya 1
37	Thi-Qar	Shatra
38	Wassit	Al Azizia
39	Baghdad-Karkh	Dora
40	Basrah	Basrah 1
41	Diwaniya	Diwaniya 1
42	Erbil	Erbil Center
43	Erbil	Koishjaq
44	Ninewa	Ayser
45	Ninewa	Tilkaif
46	Ninewa	Sinjar
47	Salah Al-Din	Balad
48	Salah Al-Din	Samarra
49	Missan	Amara
50	Missan	Al Majar Al Kaber
51	Kirkuk	Al-Hawiga 1
52	Kirkuk	Daquq
53	Kirkuk	Kirkuk 1
54	Diyala	Baquba

Table 1. Ranking of high risk districts in Iraq, according to post-campaign monitoring results and MoH review

RESULTS

- A total of 10,758 children under five, 7,289 households, 19 provinces and 59 priority districts were surveyed during intra-campaign monitoring.
- 406 population areas (one or more households) were missed during the polio campaign.
- 3 districts reported less than 80% polio immunisation coverage (Unacceptable).
- 56 districts reported greater than 80% polio immunisation coverage (Pass).
- 44 districts reported greater than 90% polio immunisation coverage (High Pass).

DISTRICT RESULTS

3 Unacceptable

districts unacceptable (<80% coverage)

56 Passed

districts passed (>80% coverage)

44 High Pass

districts with high pass (>90% coverage)

Province	District	Polio coverage (Recall) %	n/N
Babylon	Hilla 2	63.37	128/202
Baghdad-Karkh	Kadhmiya	73.95	159/215
Baghdad-Karkh	Mahmudia	77.78	133/171

Table 1. Districts with less than 80% reported polio campaign coverage

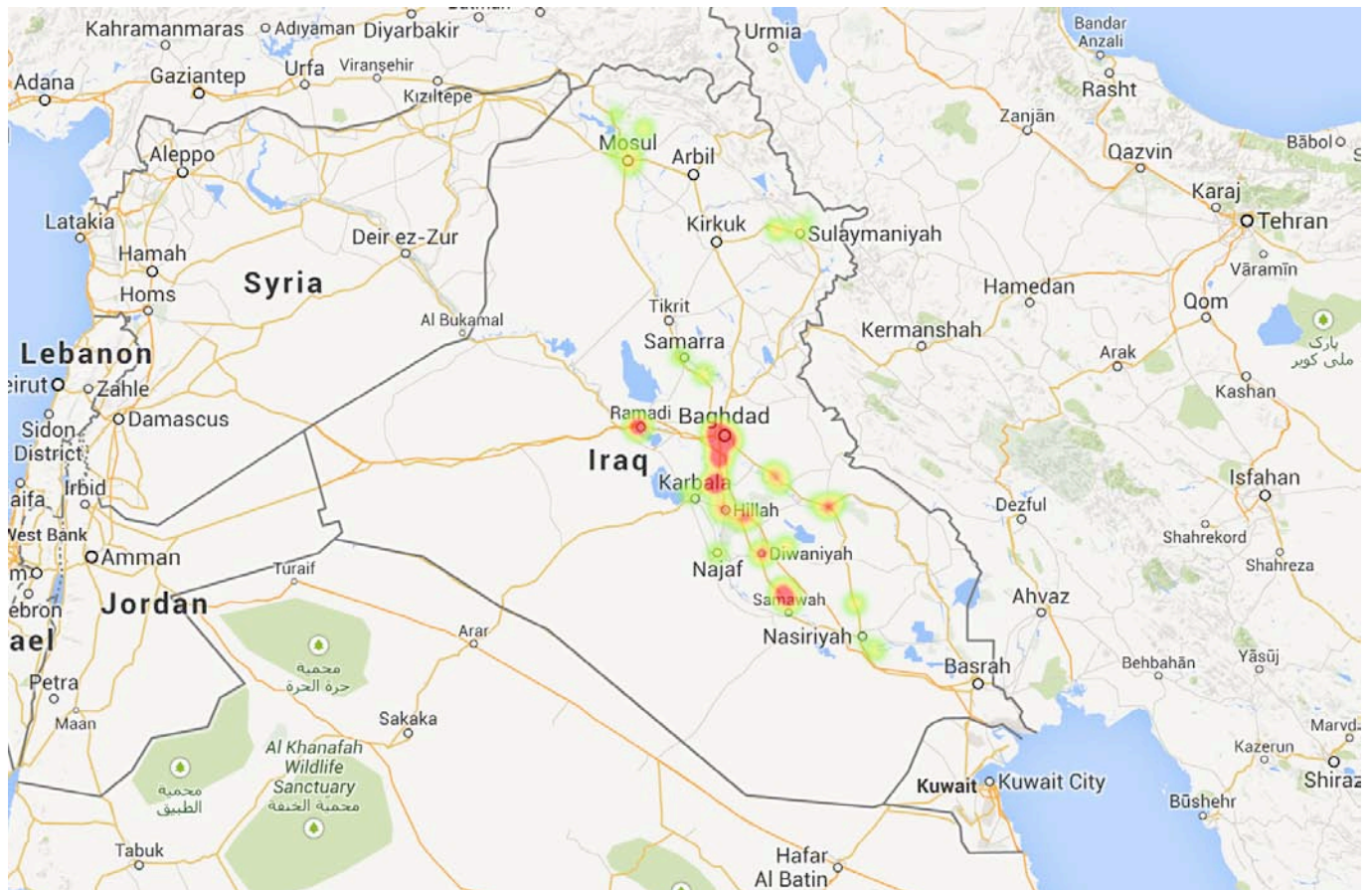


Figure 2. Heatmap of population areas not vaccinated during intra-campaign monitoring visits for May 2014 polio campaign

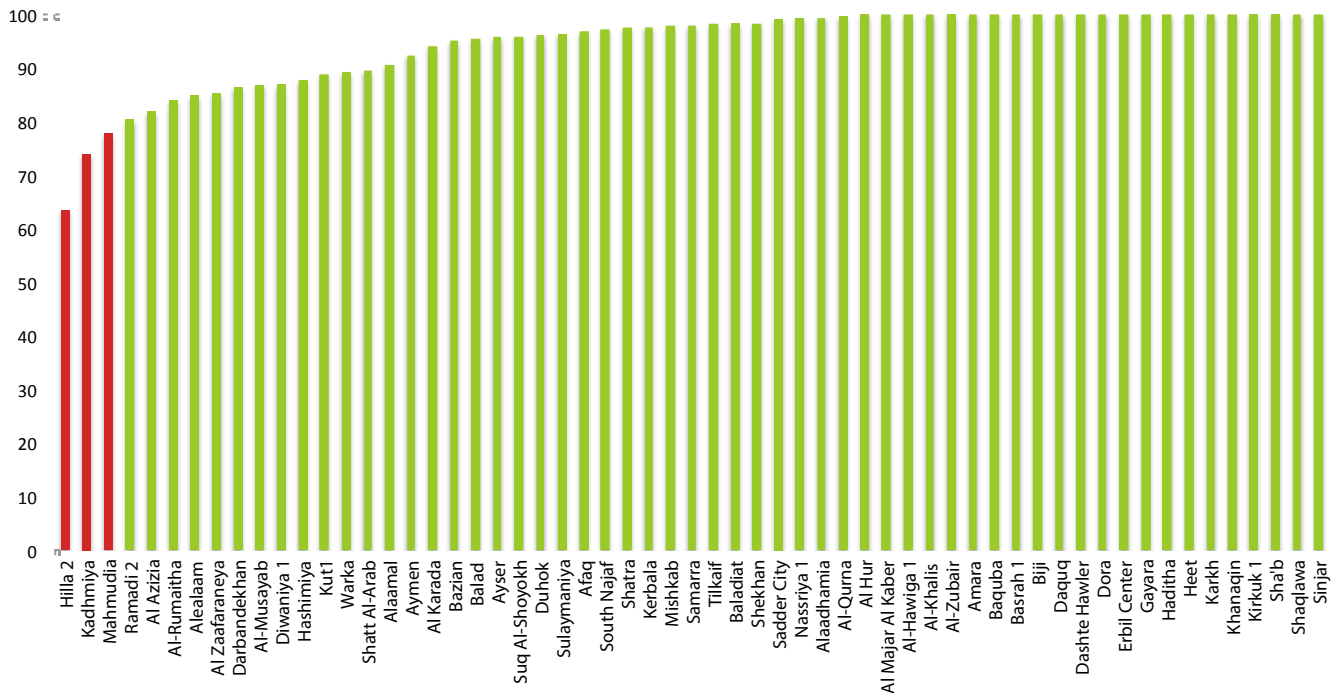


Figure 5. Districts surveyed during intra-campaign monitoring (those with less than 80% reported polio campaign coverage highlighted in red)

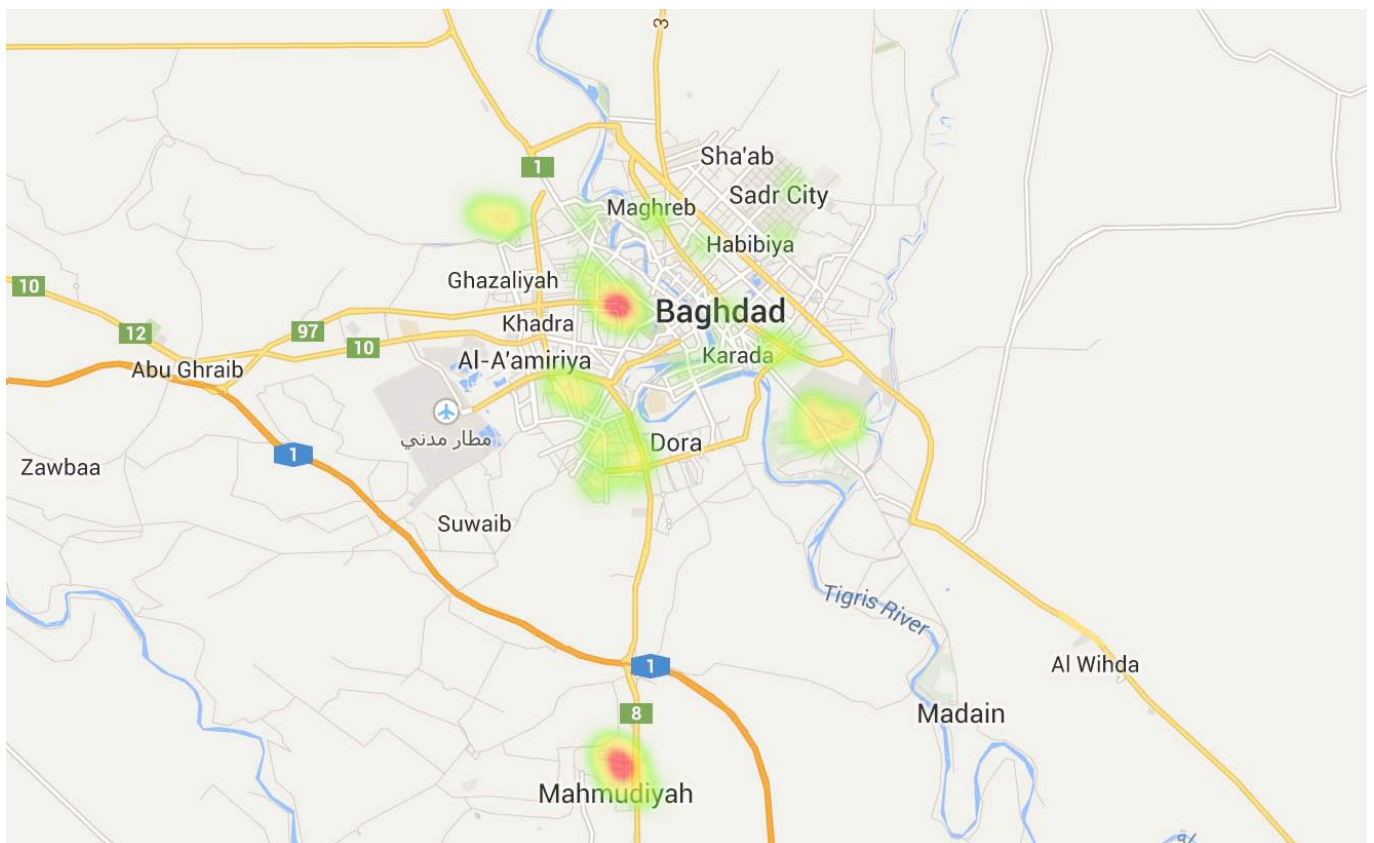


Figure 6. Heatmap of population areas of Baghdad and surrounds not vaccinated during intra-campaign monitoring visits for May 2014 polio campaign

DATA TABLES

Table 1. Households visited during intra-campaign monitoring, by supervisor, district and province

Phone	Province	District	Supervisor	HH
001	Anbar	Falluja	Abdul Staar Shakear	119
002	Anbar	Heet	Abdul Staar Shakear	120
003	Anbar	Ramadi 2	Abdul Staar Shakear	120
004	Babylon	Al-Musayab	Ibrahim Ali	117
005	Babylon	Hashimiya	Ibrahim Ali	126
006	Babylon	Hilla 2	Ibrahim Ali	121
007	Baghdad-Karkh	Alaamal	Dr.Ali Majeed Ali	127
008	Baghdad-Karkh	Kadhmiya	Dr.Shahlia Sabih Abdalrezaq	126
009	Baghdad-Karkh	Karkh	Dr.Shahlia Sabih Abdalrezaq	148
010	Baghdad-Karkh	Mahmudia	Dr.Ali Majeed Ali	142
011	Baghdad-Karkh	Dora	Mohammed Majeed Salim	121
012	Baghdad-Karkh	Alealaam	Mohammed Majeed Salim	120
013	Baghdad-Resafa	Al Resafa	Sara Rasheed Hameed	127
014	Baghdad-Resafa	Baladiat	Hawra'a Jasim Mohamad	125
015	Baghdad-Resafa	Alaadhamia	Hawra'a Jasim Mohamad	150
016	Baghdad-Resafa	Mada'in	Sara Rasheed Hameed	122
017	Baghdad-Resafa	Sadder City	Ayad Thijeel	125
018	Baghdad-Resafa	Sadder City	Ayad Thijeel	122
019	Baghdad-Resafa	Sha'b	Salman Zedin Abbas	122
020	Basrah	Shatt Al-Arab	Rehib Ibraheem	126
021	Basrah	Al-Qurna	Rehib Ibraheem	125
022	Basrah	Al-Zubair	Rehib Ibraheem	134
023	Basrah	Basrah 1	Rehib Ibraheem	126
024	Duhok	Duhok	Mezgen Jamil	126
025	Duhok	Shekhan	Mezgen Jamil	137
026	Diwaniya	Afaq	Ali Abass Fathel	113
027	Diwaniya	Diwaniya 1	Ali Abass Fathel	119
028	Diyala	Al-Khalis	Ali Reith	120
029	Diyala	Khanaqin	Ali Reith	122
030	Diyala	Baquba	Ali Reith	120
031	Erbil	Dashte Hawler	Marwa Jamil Mahmood	142
032	Erbil	Erbil Center	Marwa Jamil Mahmood	120
033	Erbil	Shaqlawat	Marwa Jamil Mahmood	126
034	Kerbala	Kerbala	Samer Nazir	109
035	Kerbala	Al Hur	Samer Nazir	123
036	Kirkuk	Al-Hawiga 1	Suzan Anwar	119
037	Kirkuk	Kirkuk 1	Suzan Anwar	119
038	Missan	Al Majar Al Kaber	Othman Hassan Ali	117
039	Missan	Amara	Othman Hassan Ali	120
040	Muthanna	Al-Rumaita	Hany Suady	127
041	Muthanna	Warka	Hany Suady	124
042	Najaf	Mishkab	Arkan Khthaer Abbas	59
043	Najaf	South Najaf	Arkan Khthaer Abbas	117
044	Ninewa	Aymen	Fadei Rasheed	125
045	Ninewa	Sinjar	Fadei Rasheed	60
046	Ninewa	Ayser	Fadei Rasheed	122
047	Ninewa	Gayara	Fadei Rasheed	126
048	Kirkuk	Daquq	Suzan Anwar	118
049	Ninewa	Tilkaif	Fadei Rasheed	118
050	Salah Al-Din	Balad	Emad Mahmood Ismail	120
051	Salah Al-Din	Biji	Emad Mahmood Ismail	117
052	Sulaymaniyah	Bazian	Mushtaq Taleb abbas	132
053	Sulaymaniyah	Darbandekhan	Mushtaq Taleb abbas	119
054	Sulaymaniyah	Sulaymaniya	Mushtaq Taleb abbas	121

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055	Salah Al-Din	Samarra	Emad Mahmood Ismail	120
056	Thi-Qar	Shatra	Noor Aldeen Ahmed	122
057	Thi-Qar	Nassriya 1	Noor Aldeen Ahmed	117
058	Thi-Qar	Suq Al-Shoyokh	Noor Aldeen Ahmed	123
059	Wassit	Al Azizia	Ahmad Jameel Ali	120
060	Wassit	Kut1	Ahmad Jameel Ali	119
Total	19 provinces	59 districts	24 supervisors	7,289 HH

Table 2. Population areas (one or more households) not vaccinated during intra-campaign monitoring visits

Province	Population areas not vaccinated during the polio campaign (based on Recall)	Documented Routine Immunisation	Household Awareness
Anbar	27	0.0%	100.0%
Babylon	79	36.4%	73.4%
Baghdad-Karkh	86	47.6%	76.7%
Baghdad-Resafa	32	13.6%	96.9%
Basrah	13	100.0%	84.6%
Diwaniya	20	0.0%	100.0%
Duhok	6	75.0%	83.3%
Kerbala	3	50.0%	100.0%
Muthanna	40	100.0%	100.0%
Najaf	4	0.0%	100.0%
Ninewa	15	0.0%	100.0%
Salah Al-Din	8	66.7%	87.5%
Sulaymaniyah	27	46.2%	96.3%
Thi-Qar	10	0.0%	100.0%
Wassit	36	83.3%	97.2%
Total	406	37.6%	88.2%

Table 3. Population areas (one or more households) not vaccinated during intra-campaign monitoring visits

Province	District	Population areas not vaccinated during the polio campaign (Based on Recall)	Documented Routine Immunisation	Household Awareness
Anbar	Ramadi 2	27	0.0%	100.0%
Babylon	Hilla 2	44	72.7%	100.0%
	Al-Musayab	17	0.0%	52.9%
	Hashimiya	18	0.0%	27.8%
Baghdad-Karkh	Kadhmiya	28	100.0%	50.0%
	Mahmudia	33	7.1%	100.0%
	Alealaam	16	88.9%	62.5%
	Alaamal	9	0.0%	100.0%
Baghdad-Resafa	Sadder City	2	100.0%	100.0%
	Baladiat	2	0.0%	100.0%
	Alaadhamia	1	0.0%	100.0%
	Al Zaafaraneya	19	0.0%	94.7%
	Al Karada	8	40.0%	100.0%
Basrah	Shatt Al-Arab	13	100.0%	84.6%
Diwaniya	Diwaniya 1	15	0.0%	100.0%
	Afaq	5	0.0%	100.0%
Duhok	Shekhan	2	100.0%	100.0%
	Duhok	4	50.0%	75.0%
Kerbala	Kerbala	3	50.0%	100.0%
Muthanna	Al-Rumaiitha	24	100.0%	100.0%
	Warka	16		100.0%
Najaf	South Najaf	4	0.0%	100.0%
Ninewa	Ayser	7	0.0%	100.0%
	Aymen	5		100.0%
	Tilkaif	3	0.0%	100.0%
Salah Al-Din	Samarra	3	100.0%	100.0%
	Balad	5	0.0%	80.0%
Sulaymaniyah	Sulaymaniya	5	75.0%	80.0%
	Darbandekhan	16	50.0%	100.0%
	Bazian	6	16.7%	100.0%
Thi-Qar	Shatra	5	0.0%	100.0%
	Nassriya 1	1		100.0%
	Suq Al-Shoyokh	4		100.0%
Wassit	Kut1	19	57.1%	100.0%
	Al Azizia	17	100.0%	94.1%
Total		406	37.6%	88.2%