

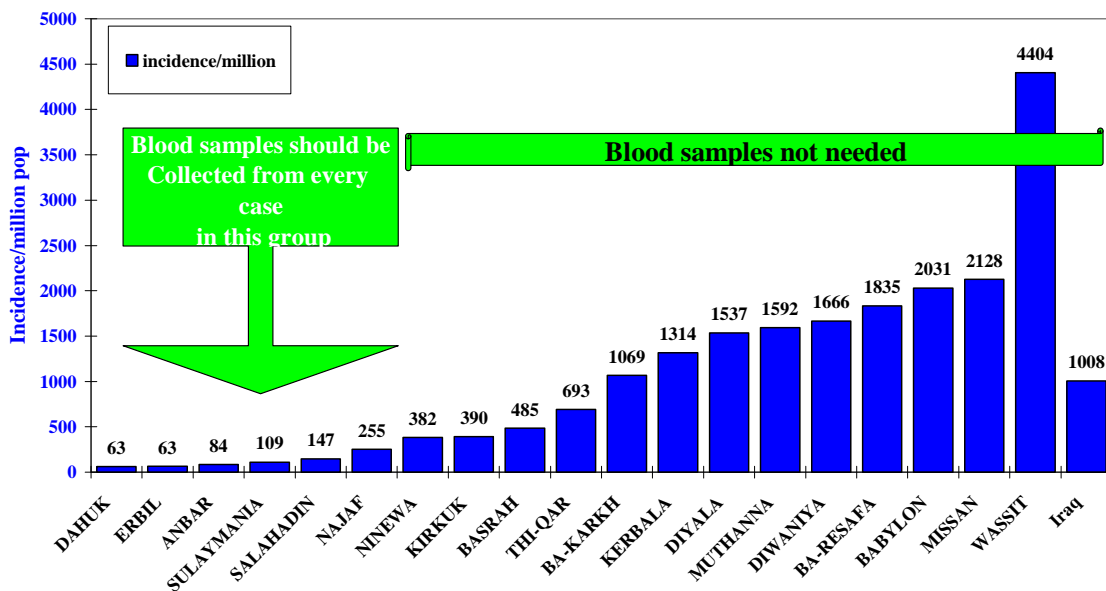


MoH and WHO Representative's Office in Iraq

Weekly feed back on measles in Iraq
Report no. 68 international week 42 ending 19/10/2009

1. **Confirmed Measles cases by province:** 30190 suspected measles cases were reported in Iraq during the first 42 weeks of 2009. The 3 northern governorates and Najaf reported 629 cases (2%) only 2 cases reported in the last 15 weeks, this a clear evidence of the positive impact of the measles campaign. The provinces where containment immunization were implemented reported 1093 (6%) cases; the majority of cases in the containment group 1090 or (61%) were reported from Mosul where only selective SIAs have been implemented. The 4 Southern provinces of Basra, Missan, Thiqr and Muthana reported 5019 (17%) of the total cases. The remaining 8 provinces in central Iraq reported the remaining (22738) 76% of cases. It is clear that the outbreak is mainly concentrated in the central part of Iraq and from where it has spread to South and North. The DoH where the outbreak has been well established and many cases were confirmed by NML there is no need to collect blood samples. However, the case investigation form should be completed carefully for every case. It is also important to collect serum and other specimens from cases reported in children below the age of 9 months..

Fig (1) measles incidence/million population by DoH, Iraq, First 42 weeks of 200 2009

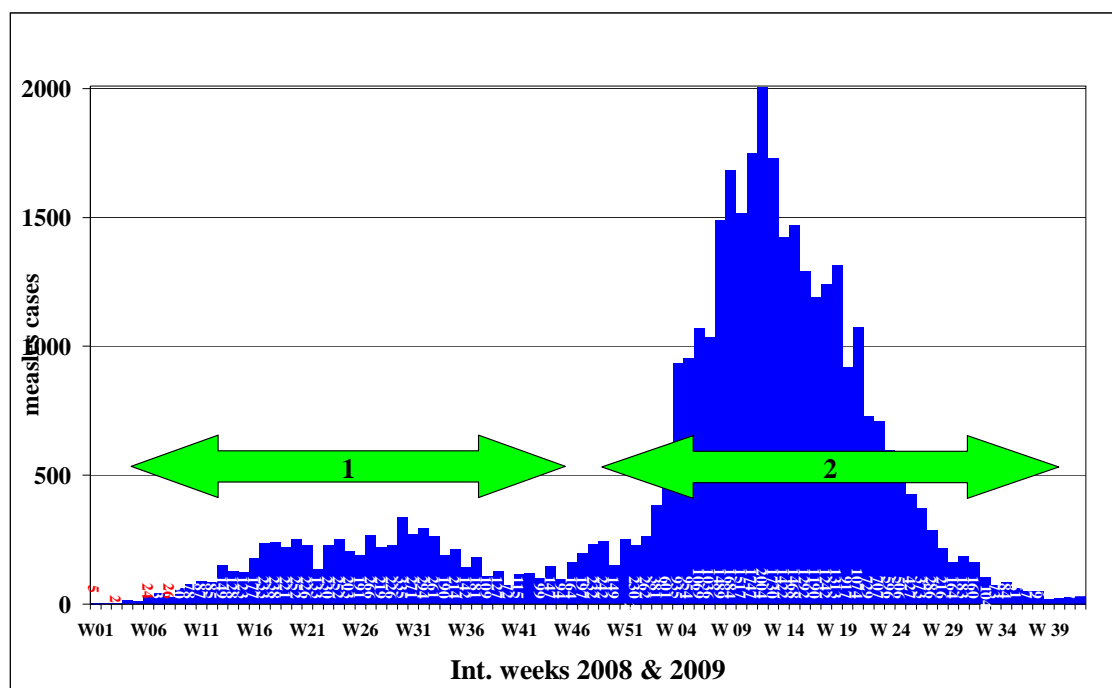


Notified Measles cases by international week:

Fig. 2A illustrates the number of notified measles cases by week of onset, during 2008 and in the first 42 weeks of 2009. In 2008 (8134) measles cases were reported in comparison to 30190 in the first 42 weeks of 2009. It is clear that the outbreak is on the down trend during the last 28 weeks. During this year almost 719 measles cases are reported every week compared to 150 cases per week during the same period in 2008. It is apparent that the measles outbreak occurred in 2 waves; each wave took about 42 weeks and was concentrated in a particular

group of DoHs. The current outbreak seems to be the most severe and is now on the down trend.

Fig (2A) Reported measles cases by international week, Iraq, first 42 weeks of 2009

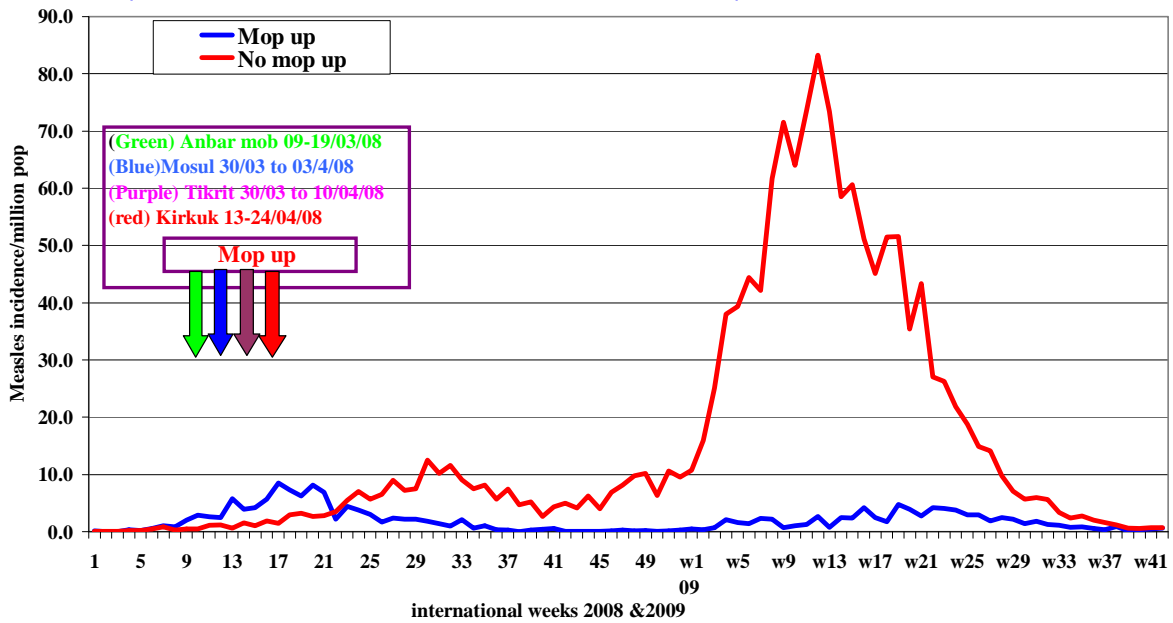


On 24 May, WHO and UNICEF supported the 3 northern governorates and Najaf DoH to conduct a 10 days house to house campaign to prevent the spread of measles outbreak to Kurdistan Region in Iraq. By the 10th day of the campaign, 93% of the target children aged 9-59 months were reached and vaccinated by measles Monovalent vaccine; the Iraq Red Crescent Society and medical and nursing schools contracted to monitor the campaign and CERF funds supported the campaign financially.

2. Measles cases according to the implementation of Mop Up campaigns.

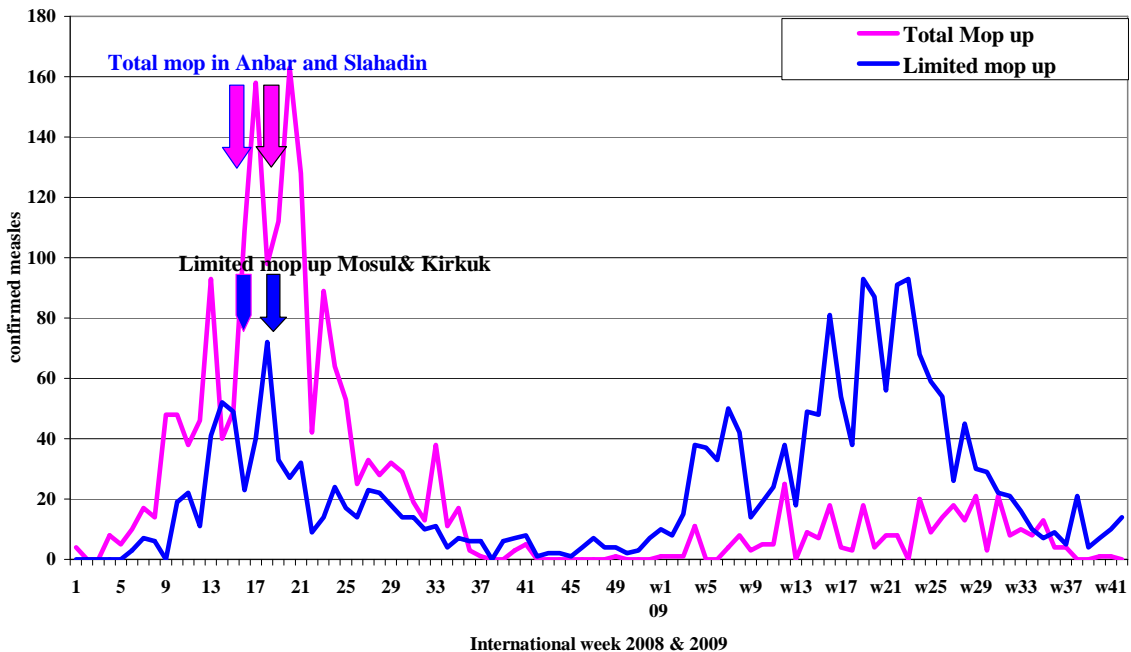
The first measles outbreaks were reported from Anbar and Salah al-Din provinces, followed by districts plagued by a lack of security such as the Ninewa and Kirkuk provinces. Routine measles vaccination coverage in these areas is generally far below the average for the country. WHO and UNICEF supported MoH's efforts in conducting total house to house Mop Up campaigns targeting all children (1-5 years of age) in the Anbar and Salah al-Din provinces and in selected districts and sub-districts in Ninewa and Kirkuk. The graph below shows that the Mop Up campaigns succeeded in controlling the outbreak. However, as of **week 13**, other outbreaks started in some areas where similar campaigns were not conducted, such as Baghdad, Diwanyia, Babil, Karbala and Diala.

Fig (2B) Measles Incidence/Million population by international weeks in DoHs Where Mop up operations were conducted and not conducted, Iraq, 2008 and first 42 weeks of 2009



The chart above (2B) show that Mop Up campaigns can succeed in controlling measles outbreaks in areas affected by a lack of security and where less than 70% of infants were vaccinated by MCV. Even if containment measures are conducted late (7-20 weeks following the confirmation of the outbreak), and in limited areas to be successful, the target age group and districts need to be well guided by the measles immunity profile and there is a good epidemiological description of the first few laboratory confirmed cases. It is clear that this huge outbreak (38324) reported cases in 2008 & first 42 weeks of 2009) could have been avoided if a nation wide Campaign had been implemented instead of fragmented SIAs

(2C) Measles incidence/million population by total or selective mop up, according to week of onset. 2008 and first 42 weeks. 2009



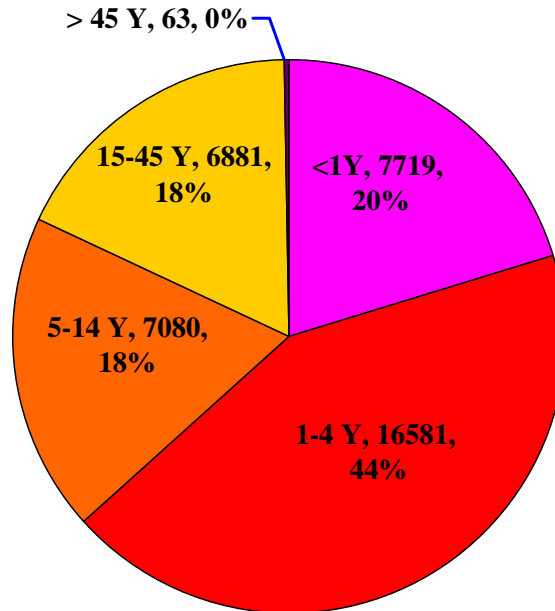
3. Measles cases according to the size of Mop Up campaigns.

Fig. 2C. shows that, both total and limited Mop Up campaigns; succeeded in the control of the measles outbreaks. As expected; total Mop Up gave better results in measles cases is seen in provinces where limited SIAs up was done mainly in Mosul.

4. Age distribution:

Fig 3 shows that **64%** of measles cases reported in the first 42 weeks of 2009 were among children <5years of age, a clear indication of serious problems in routine coverage in the last 4 years. Due to lack of funding WHO could not support the requested support to conduct SIAs.

Fig. 3 measles cases by age group, Iraq, 2008 and first 42 weeks of 2009

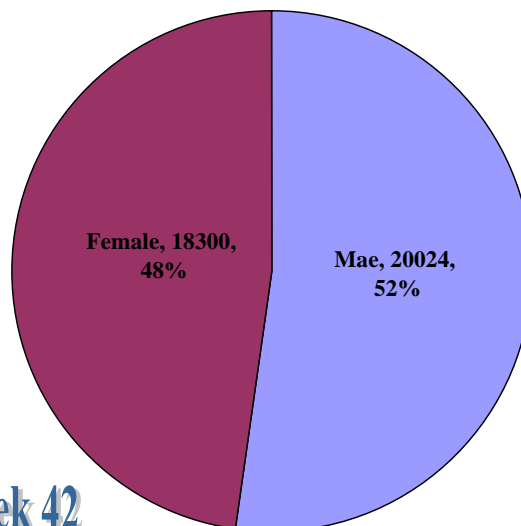


5. Sex distribution:

Confirmed measles cases are distributed almost evenly between males and females.

Fig. 4 Confirmed measles by sex, Iraq 2008 & first 42 weeks of 2008&2009

Reported measles by sex, Iraq, 2008 & 2009*



*up to week 42

6. Immunization status of notified measles cases in Iraq:

17% immunized, 69% not immunized and 14% unknown vaccination status.

Fig. 5 confirmed measles cases among children 1-5 years of age by vaccination status, Iraq, 2008

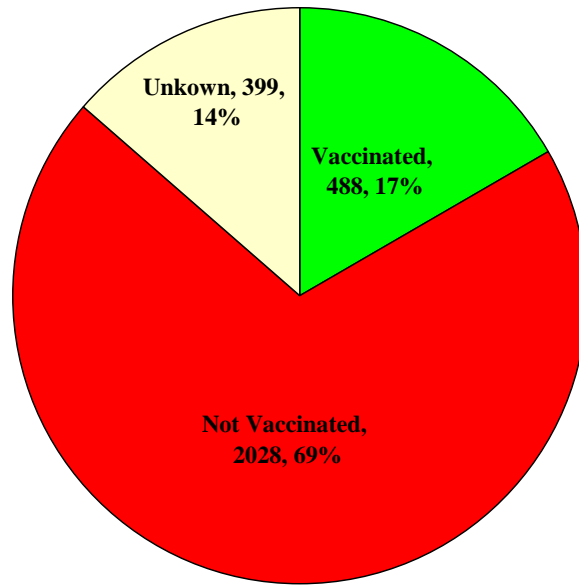
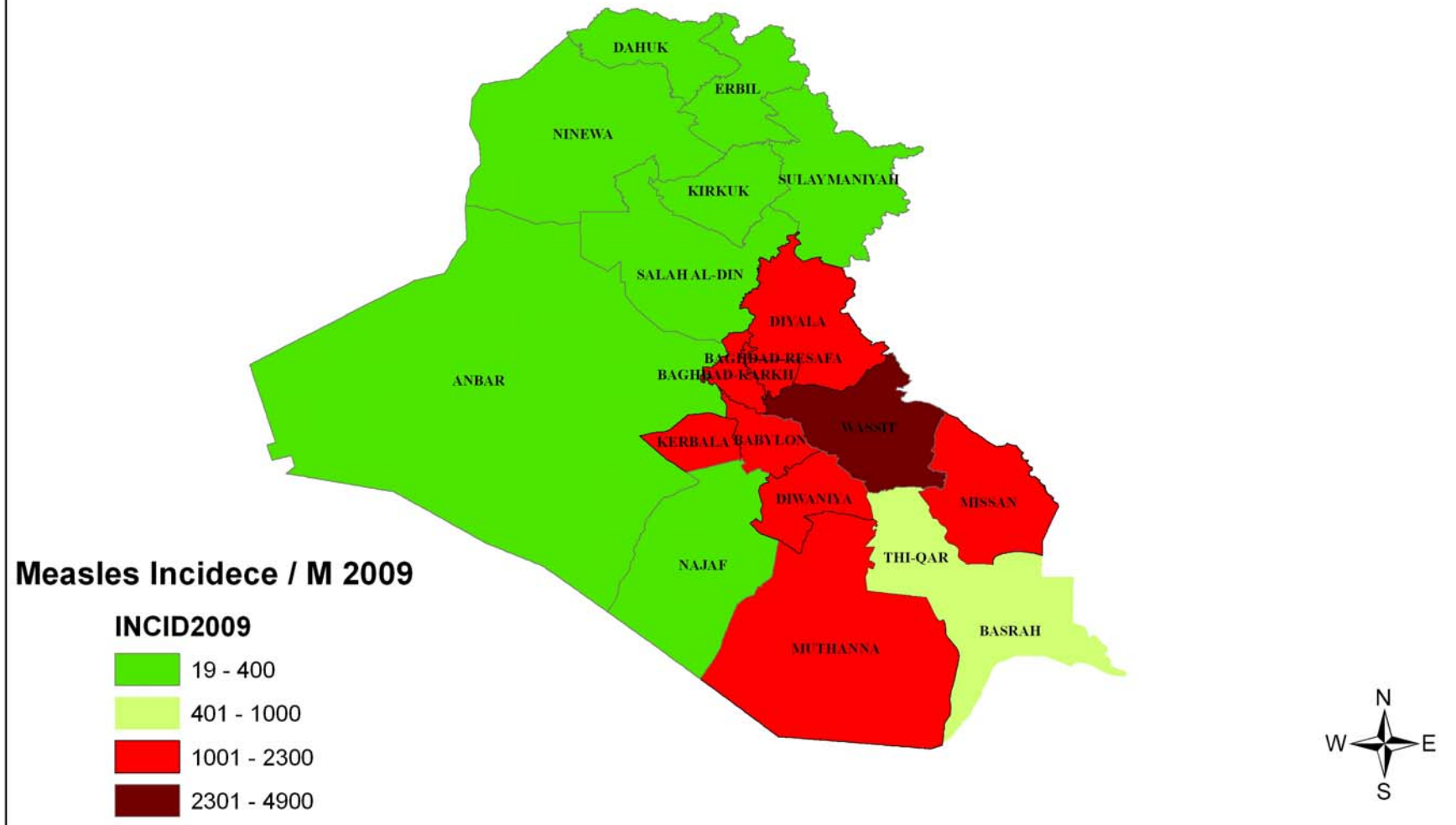


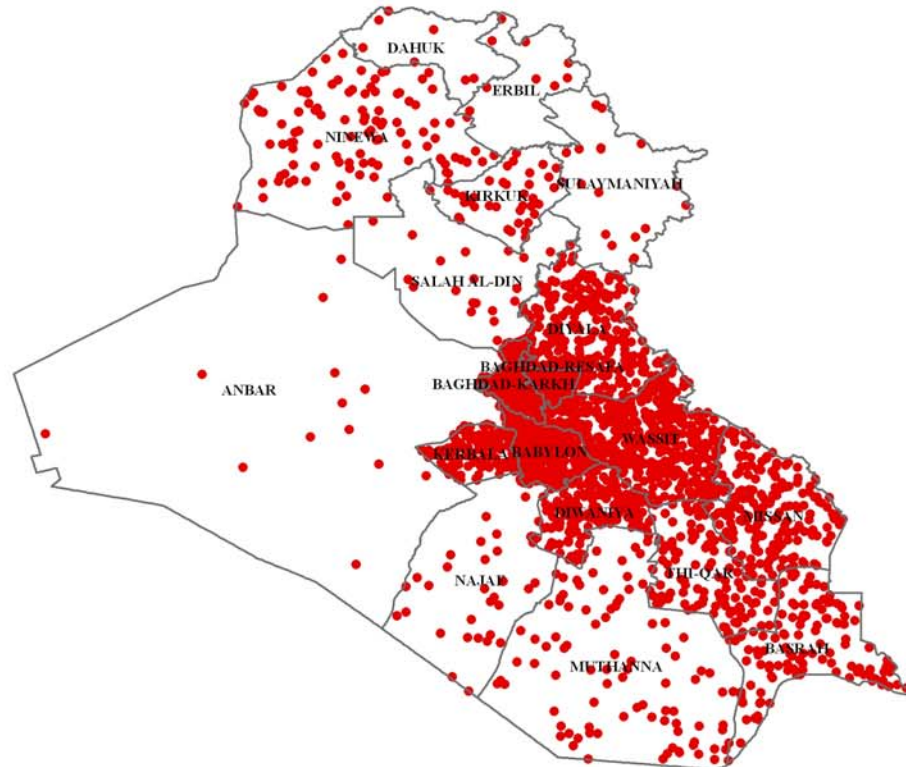
Table (1) Measles Bulletin, WHO Iraq, Cumulative measles results for all 2008 and the first 42 weeks of 2009

Province	Total pop	No. of cases				Incidence per million population	
		2009	Total 2008	total	% of cases	2009	Total 2008
DAHUK	942268	59	28	87	0%	63	30
ERBIL	1482958	94	7	101	0%	63	5
ANBAR	1483280	125	1056	1181	0%	84	712
SULAYMANIA	1547072	169	30	199	1%	109	19
SALAHADIN	1254303	185	637	822	1%	147	508
NAJAF	1206264	307	68	375	1%	255	56
NINEWA	1027800	1093	344	1457	4%	382	335
KIRKUK	2864705	401	364	745	1%	390	127
BASRAH	2426607	1176	113	1289	4%	485	47
THI-QAR	1640193	1137	482	1619	4%	693	294
BA-KARKH	2937300	3140	789	3929	10%	1069	269
KERBALA	930509	1223	711	1934	4%	1314	764
DIYALA	1486547	2285	80	2365	8%	1537	54
MUTHANNA	583511	929	402	1331	3%	1592	689
DIWANIYA	1025253	1708	1076	2784	6%	1666	1049
BA-RESAFA	3650383	6698	663	7361	22%	1835	182
BABYLON	1625434	3301	843	4144	11%	2031	519
MISSAN	834977	1777	173	1950	6%	2128	207
WASSIT	995296	4383	268	4651	15%	4404	269
Iraq	29944660	30190	8134	38324	100%	1008	272

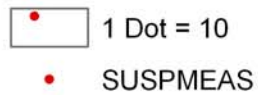
Measles Incidence per Million Population by Province Iraq - first 42 weeks 2009



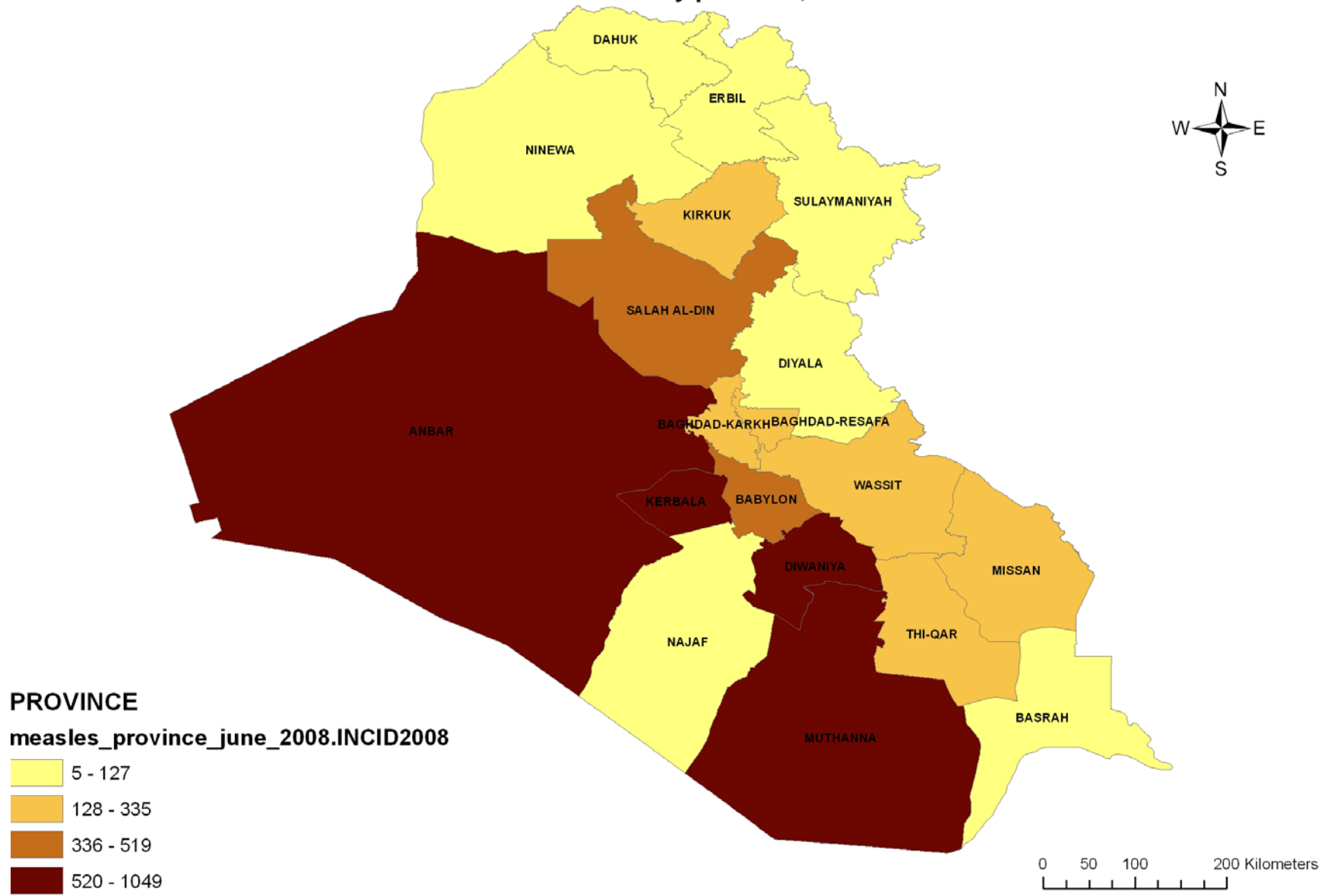
Measles cases by Province, Iraq , first 42 weeks, 2009



Suspect Measles Cases 2009



Measles incidence by province, 2008



Confirmed measles Cases by District Iraq - up to 31/12/08

