

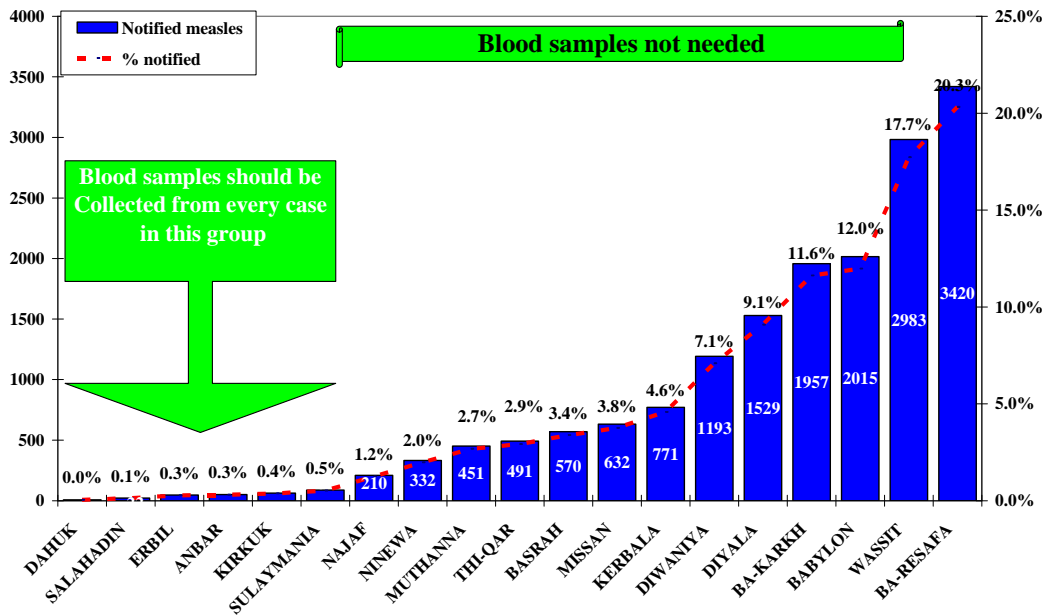


WHO Representative's Office in Iraq

Weekly Feedback on Measles in Iraq
Report no. 46 International week 14 ending 05/04/2009

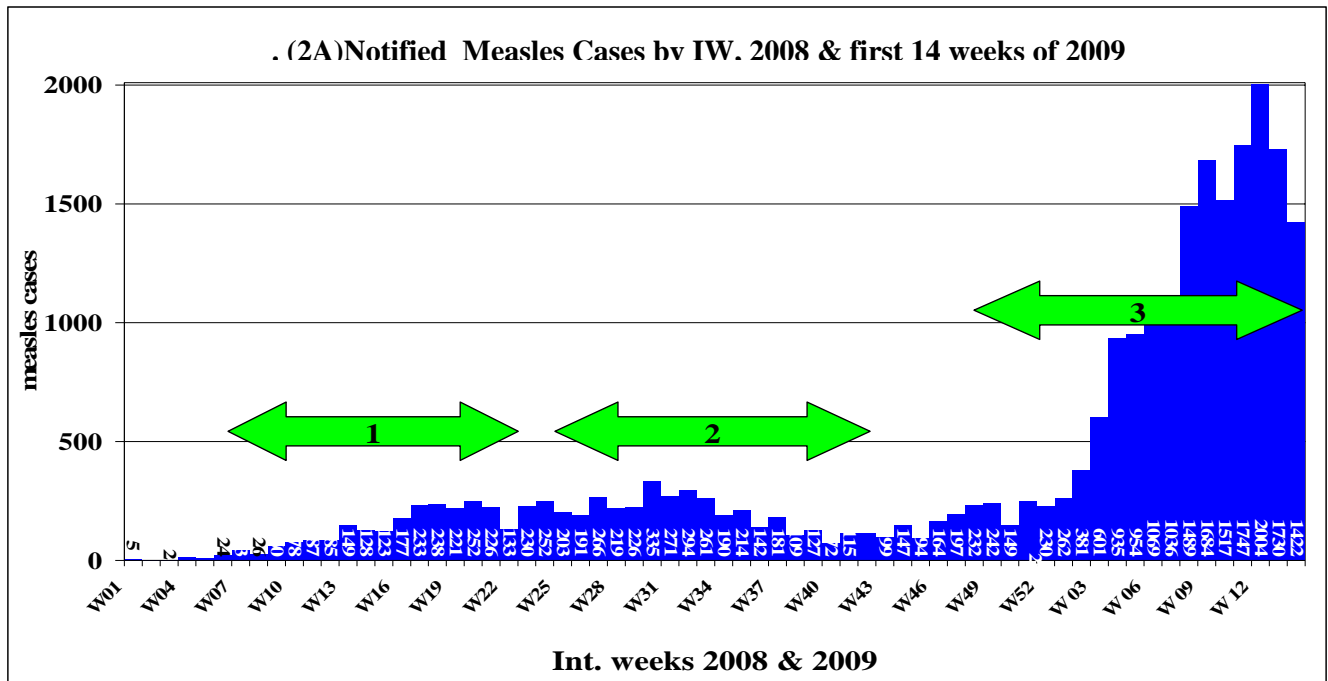
- Confirmed Measles cases by province:** during the first 14 weeks of 2009, out of 16831 suspected measles cases reported in Iraq, 351 cases (2%) were reported by the 3 Northern Governorates. The provinces of Najaf, Anbar, Salahadin, Ninewa and Kirkuk where containment operations were done early in 2008 reported 468 (3%) cases; the majority of cases in the containment group (332 or 71%) were reported from Mosul where only selective SIAs were carried out. The 4 Southern provinces of Basra, Missan, Thi qar and Muthana reported 2144 (12%) of the total cases. The remaining 8 provinces in central Iraq reported the remaining (13831) 82% of cases. It is clear that the outbreak is mainly concentrated in the Central part of Iraq and is gradually moving to the South and North. The DoH where the outbreak is well established and many cases were confirmed by NML do not require the collecting of blood samples; however, the case investigation should be completed carefully for every case. It is also important to collect serum and other specimens from cases reported in children below 6 months of age.

Fig (1) Notified Measles by DoH, Iraq, first 14 weeks of 2009



2. Notified Measles cases by international week:

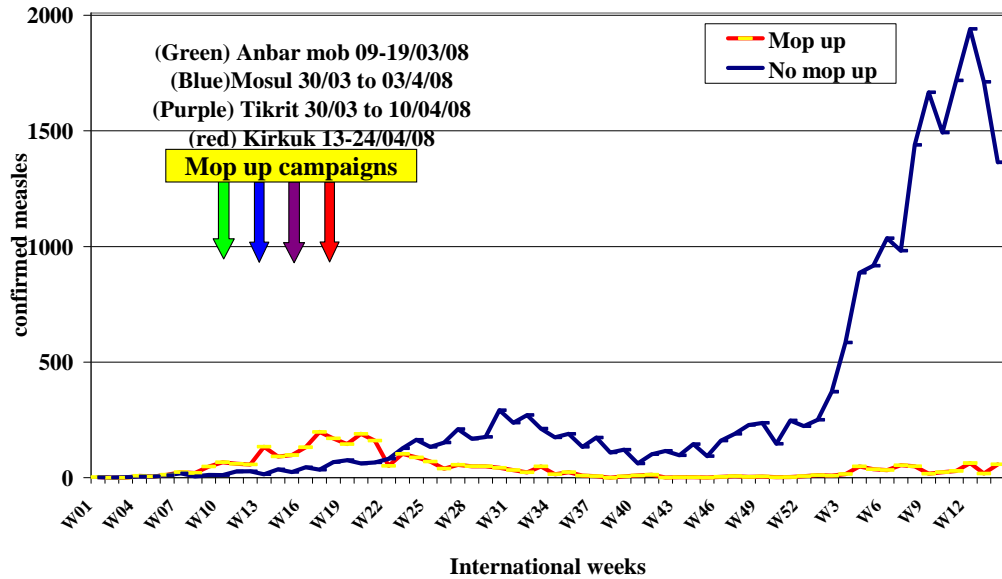
Fig. 2A illustrates notified measles cases in Iraq by week of onset, during 2008 and the first 14 weeks of 2009. In 2008 (8134) measles cases were reported compared to 15409 in the first 14 weeks of 2009. It is clear that the outbreak is gaining momentum. During this year almost 1100 measles cases are reported every week compared to less than 50 cases per week during the same period in 2008. It is apparent that the measles outbreak occurred in 3 waves; each wave took about 17 weeks and was concentrated in a group of DoHs. The current outbreak seems to be the biggest and is now at its peak. A fourth and last wave is expected in the upcoming weeks in the 3 NGs if an emergency campaign is not done.



3. Confirmed Measles Cases according to the implementation of Mop Up campaigns.

The first measles outbreaks were reported from the Anbar and Salah Al-Din provinces, followed by districts plagued by lack of security in the Ninewa and Kirkuk provinces. Routine measles vaccination coverage in these areas was generally far below the average for the country. WHO and UNICEF supported MoH in conducting 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, Diwaniya, Babil, Karbala and DIALA.

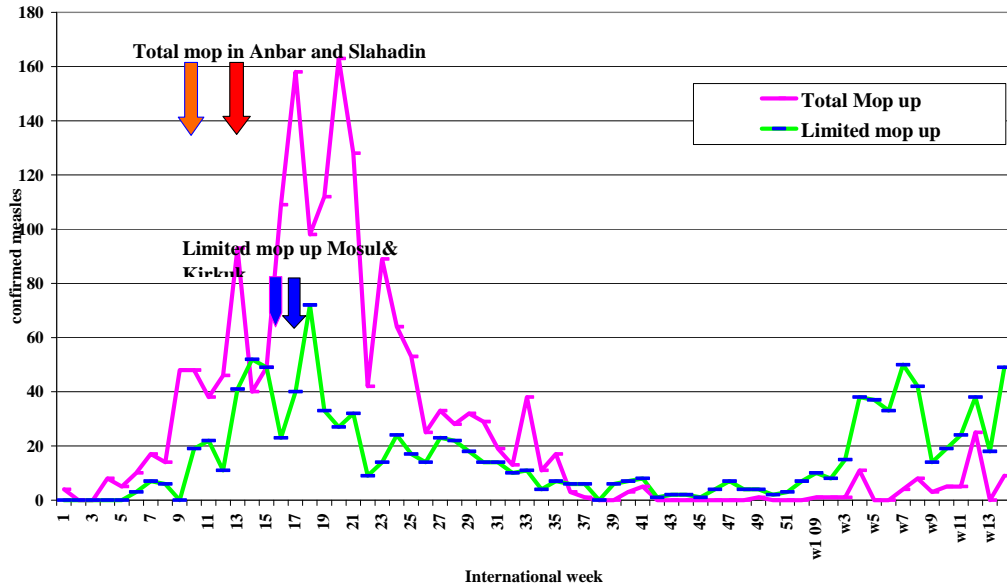
Fig (2C) shows suspected Measles Cases by International weeks in provinces where Mop Up operations were conducted and not conducted, Iraq, 2008 and first 14 weeks of 2009



The chart above (2C) show that Mop Up campaigns can succeed in controlling measles outbreaks in areas affected by lack of security and where less than 70% of infants are vaccinated by MCV, even if containment measures were conducted late (7-14 weeks following the confirmation of the outbreak), and in limited areas if the target age group and districts are 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 (23,543 reported cases in 2008 & first 14 weeks of 2009) could have been avoided if a nationwide campaign had been implemented instead of fragmented SIAs

Fig (2D) Notified measles by total or selective Mop Up, using MCV for 1-5 year old children, according to week of onset, 2008 and first 14 weeks of 2009



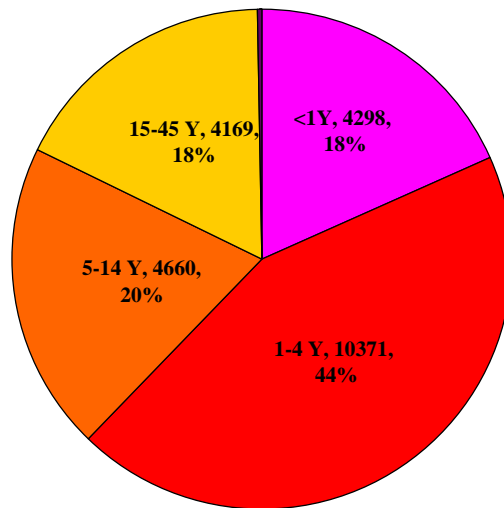
4. Measles Cases according to the Size of Mop Up campaigns.

Fig. 2D; show that both total and limited Mop Up campaigns succeeded in the control of the measles outbreaks, however, as expected total Mop Up gave better results in terms of number of cases, and more swift and sustained control. Another wave of measles cases is seen in provinces where limited MoP Up was done mainly in Mosul.

5. Age Distribution:

Fig 3 shows that 62% of Measles Cases reported in 2008 and first 14 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 a lack of funding WHO could not provide for requested support to conduct SIAs.

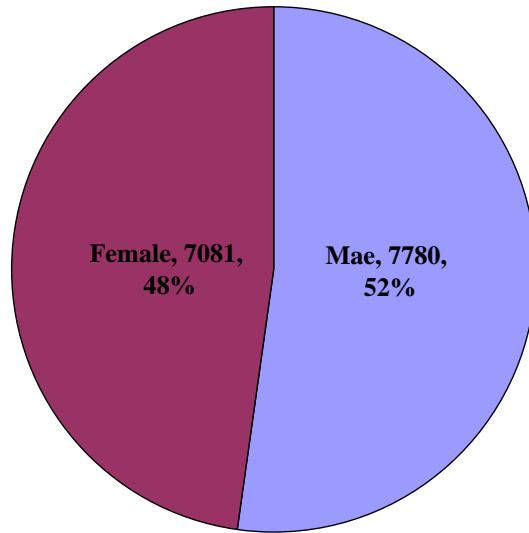
Fig. 3 notified Measles Cases by age group, Iraq, first 14 weeks of 2009



6. Sex distribution:

Confirmed Measles Cases are distributed almost evenly between males and females.

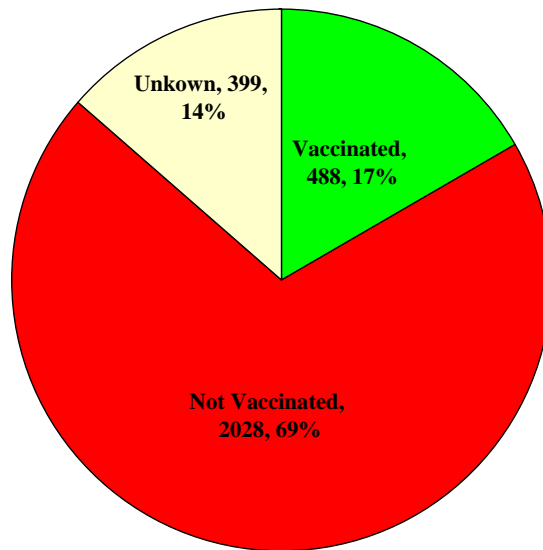
Fig. 4 Confirmed Measles by Sex, Iraq 2008 & first 14 weeks of 2009



7. Immunization Status of Notified Measles Cases in Iraq:

19% immunized, 66% not immunized and 15% unknown vaccination status.

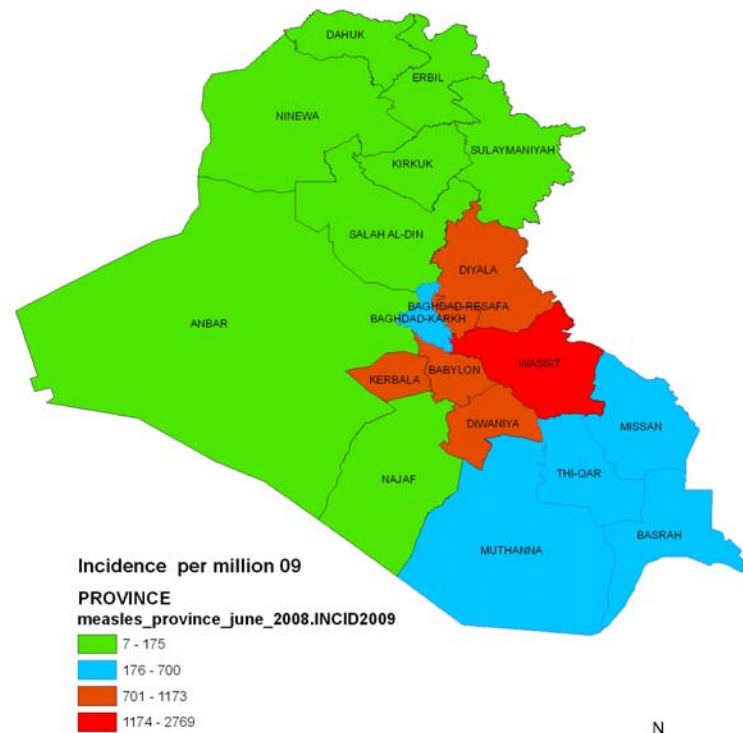
Fig. 5 confirmed measles cases among children 1-5 years of age by vaccination status, Iraq, 2008



Measles Bulletin, WHO Iraq, Cumulative measles results for 2008 and the first 14 weeks of 2009

Province	Total pop	No. of cases				Incidence per million population	
		First 13 Ws 09	2008	total	% of cases	first 13 Ws 09	2008
DAHUK	942268	7	28	35	0%	7	30
SALAHADIN	1254303	22	637	659	3%	18	508
ERBIL	1482958	47	7	54	0%	32	5
ANBAR	1483280	51	1056	1107	4%	34	712
SULAYMANIA	1547072	87	30	117	0%	56	19
KIRKUK	1027800	63	344	407	2%	61	335
NINEWA	2864705	332	364	696	3%	116	127
NAJAF	1206264	210	68	278	1%	174	56
BASRAH	2426607	570	113	683	3%	235	47
THI-QAR	1640193	491	482	973	4%	299	294
BA-KARKH	2937300	1957	789	2746	11%	666	269
MISSAN	834977	632	173	805	3%	757	207
MUTHANNA	583511	451	402	853	3%	773	689
KERBALA	930509	771	711	1482	6%	829	764
BA-RESAFA	3650383	3420	663	4083	16%	937	182
DIYALA	1486547	1529	80	1609	6%	1029	54
DIWANIYA	1025253	1193	1076	2269	9%	1164	1049
BABYLON	1625434	2015	843	2858	11%	1240	519
WASSIT	995296	2983	268	3251	13%	2997	269
Iraq	29944660	16831	8134	24965	100%	562	272

Measles incidence by Province Iraq - first 13 weeks 2009



Measles incidence by province, 2008

