

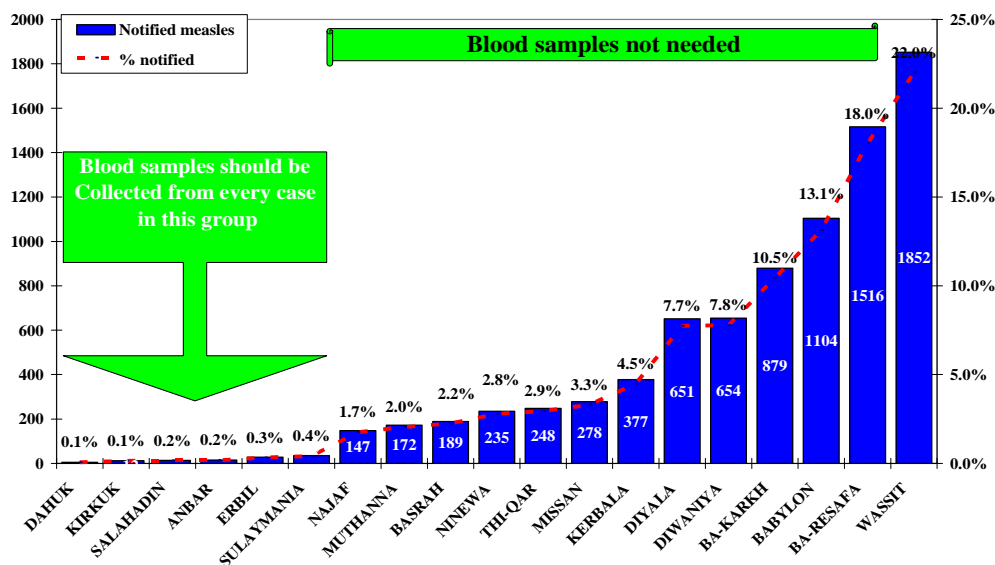
WHO Representative's Office in Iraq

Weekly Feedback on Measles in Iraq

Report no. 42 - International week 9 ending 01/03/2009

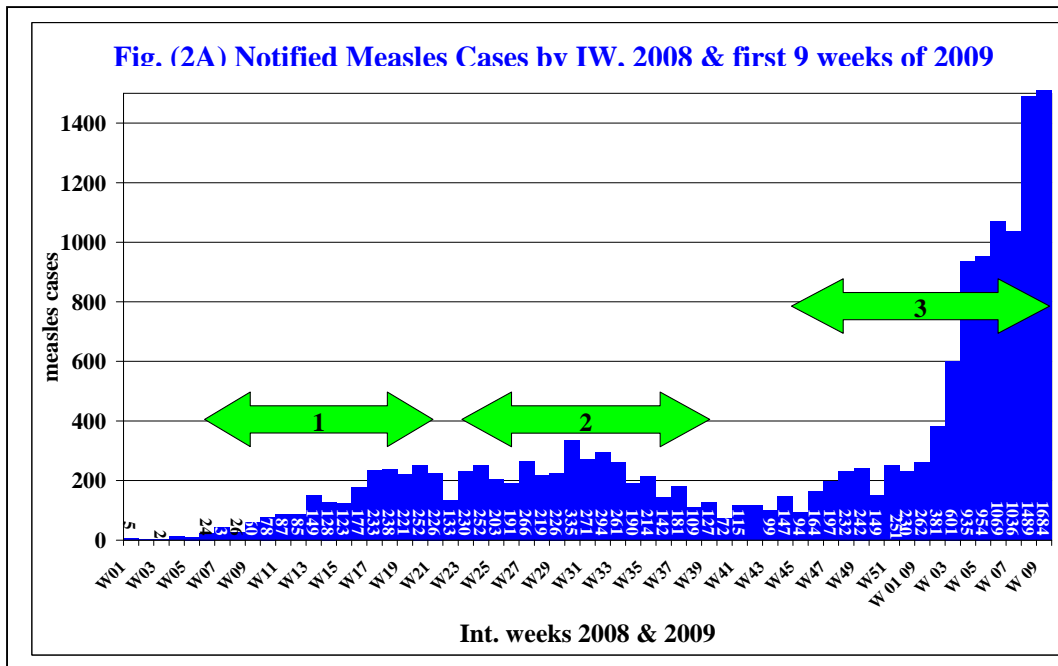
- Confirmed Measles cases by province:** during the first 9 weeks of 2009, out of 8411 suspected measles cases reported in Iraq, 68 cases (1.0%) were reported by the 3 Northern governorates. The provinces of Anbar, Salahadin, Ninewa and Kirkuk, where containment operations were done early in 2008, reported 276 (3%) cases; the majority of cases in the containment group (235 or 85%) were reported from Mosul where only selective SIAs were carried out. The 4 Southern provinces of Basra, Missan, Thi qar and Muthana reported 887 (11%) of the total cases. The remaining 8 provinces in Central Iraq reported the remaining 85% 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. As circulated by NML director, it is important that serum; urine and nasopharyngeal samples are timely and correctly collected from cases reported from the North as well as Salahadin, Anbar and Kirkuk. The remaining 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 9 weeks of 2009



2. Notified Measles Cases by International Week:

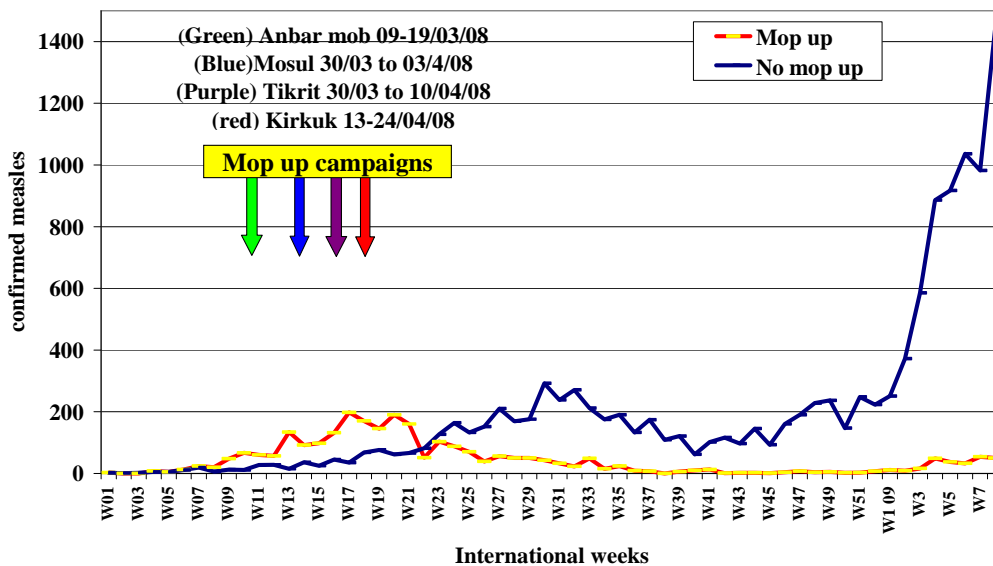
Fig. 2A illustrates notified measles cases in Iraq by week of onset, during 2008 and the first 9 weeks of 2009. In 2008, (8134) measles cases were reported compared to 8411 in the first 9 weeks of 2009. It is clear that the outbreak is gaining momentum. During this year almost 1000 measles cases are reported every week compared to less than 140 cases per week in 2008. It is apparent that the measles outbreak occurred in 3 waves; each wave took about 19 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.

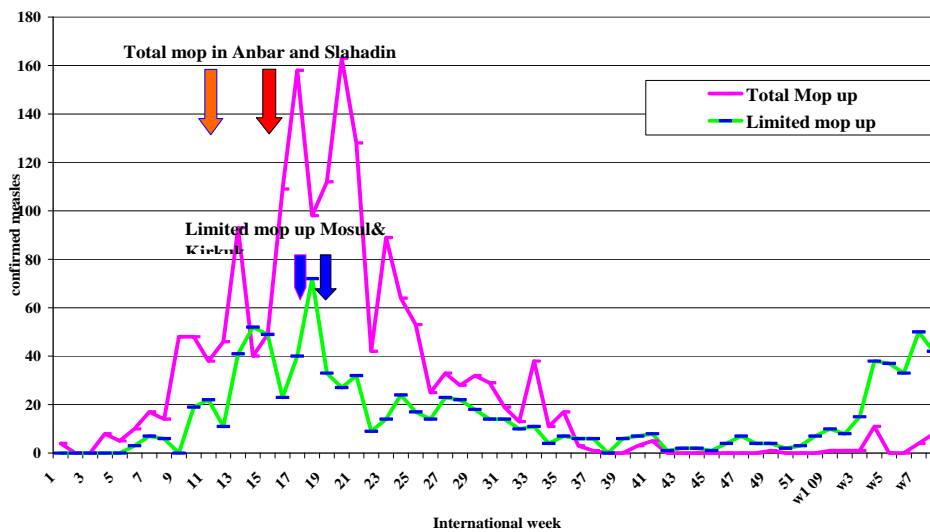
The first measles outbreaks were reported from the Anbar and Salah Al-Din provinces, followed by districts plagued by lack of security in the Ninewa and Kirkuk provinces. Routine measles vaccination coverage in these areas was generally far below the average for the country. WHO and UNICEF supported 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 12, 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 9 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 (7-9 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 (14861 reported cases in 2008 & first 9 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 8 weeks of 2009



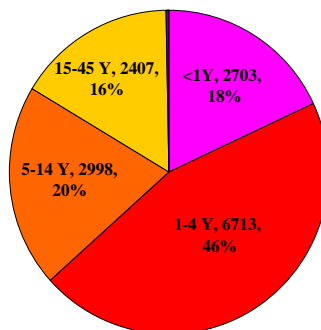
4. Measles Cases according to the Size of Mop Up campaigns.

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 64% of suspected measles cases were reported 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 the requested support to conduct SIAs.

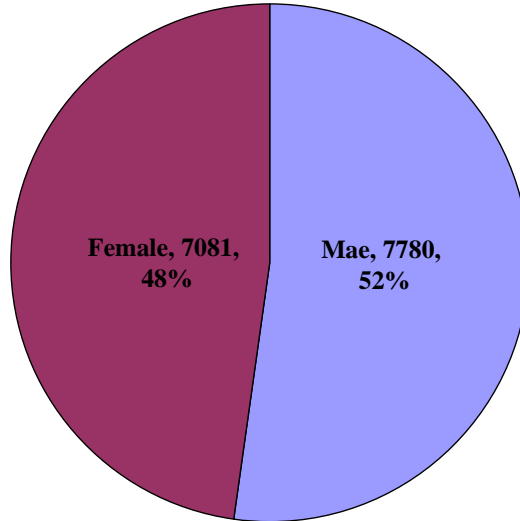
Fig. 3 notified measles cases by age group, Iraq, first 9 weeks of 2009



6. Sex Distribution:

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

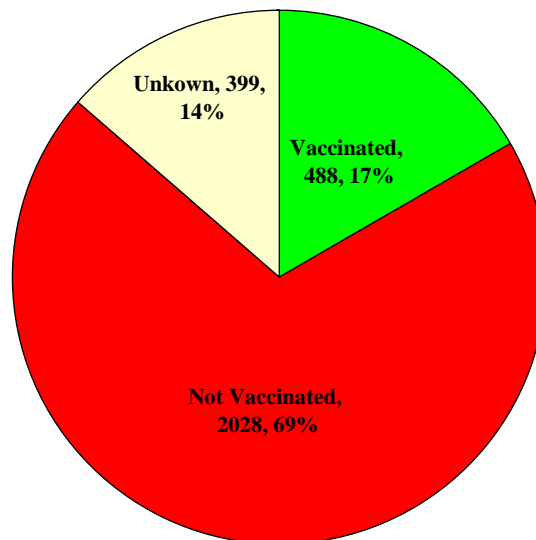
Fig. 4 Confirmed Measles by Sex, Iraq 2008 & first 9 weeks of 2009



7. Immunization Status of Notified Measles Cases in Iraq:

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

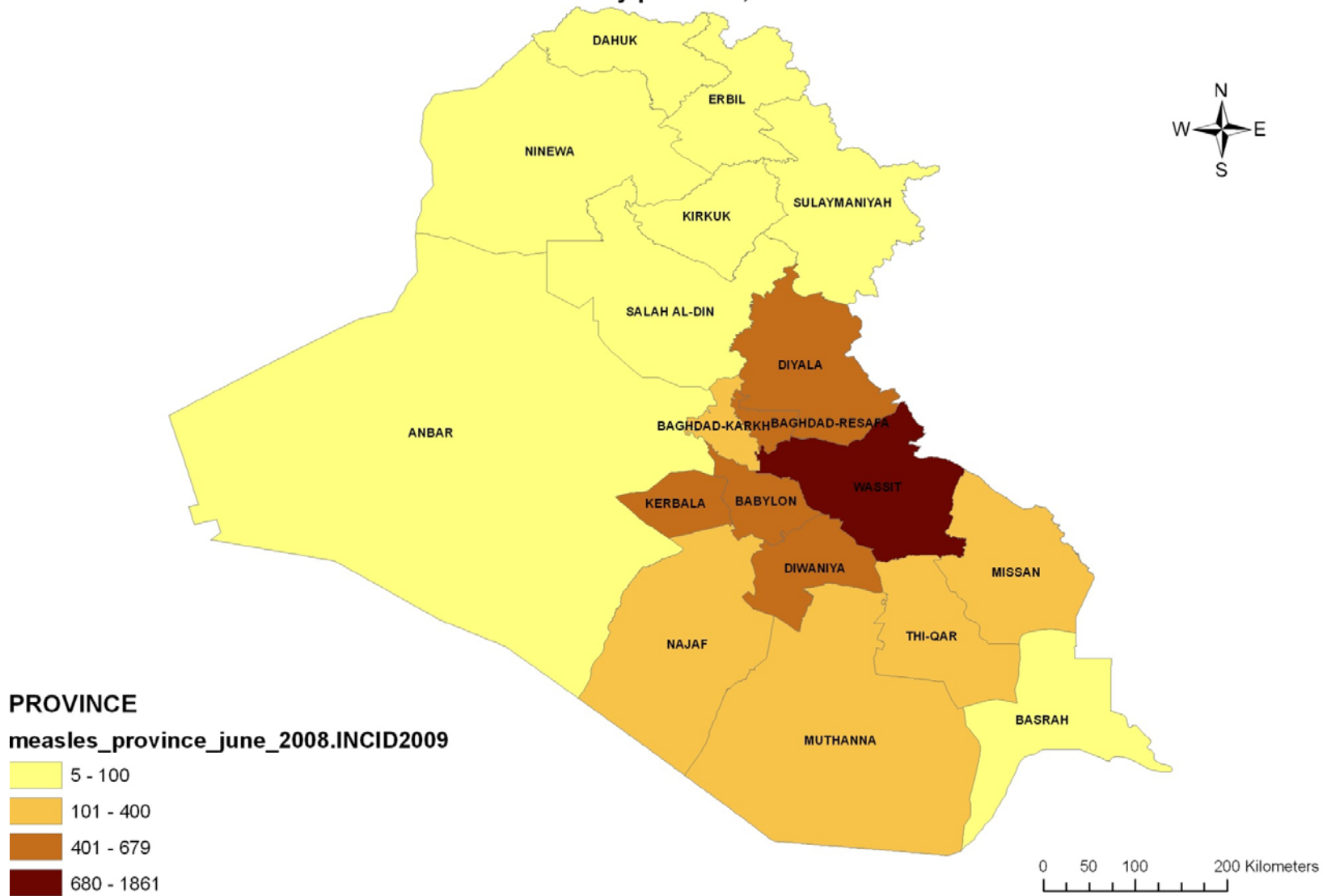
Fig. 5 confirmed measles cases among children 1-5 years of age by vaccination status, Iraq, 2008



Measles Bulletin, WHO Iraq, Cumulative measles results for 2008 and the first 9 weeks of 2009

Province	Total pop	No. of cases				Incidence per million population	
		First 9 Ws 09	2008	total	% of cases	first 9 Ws 09	2008
DAHUK	942268	5	28	29	0%	5	30
ANBAR	1483280	15	1056	1070	10%	10	712
SALAHADIN	1254303	14	637	637	6%	11	508
KIRKUK	1027800	12	344	350	3%	12	335
ERBIL	1482958	28	7	21	0%	19	5
SULAYMANIA	1547072	35	30	44	0%	23	19
BASRAH	2426607	189	113	191	2%	78	47
NINEWA	2864705	235	364	466	4%	82	127
NAJAF	1206264	147	68	141	1%	122	56
THI-QAR	1640193	248	482	577	5%	151	294
MUTHANNA	583511	172	402	518	5%	295	689
BA-KARKH	2937300	879	789	1064	9%	299	269
MISSAN	834977	278	173	256	2%	333	207
KERBALA	930509	377	711	902	8%	405	764
BA-RESAFA	3650383	1516	663	1138	10%	415	182
DIYALA	1486547	651	80	197	2%	438	54
DIWANIYA	1025253	654	1076	1408	13%	638	1049
BABYLON	1625434	1104	843	1246	11%	679	519
WASSIT	995296	1852	268	978	9%	1861	269
Iraq	29944660	8411	8134	11233	100%	281	272

Measles incidence by province, first 9 Ws 2009



Measles incidence by province, 2008

