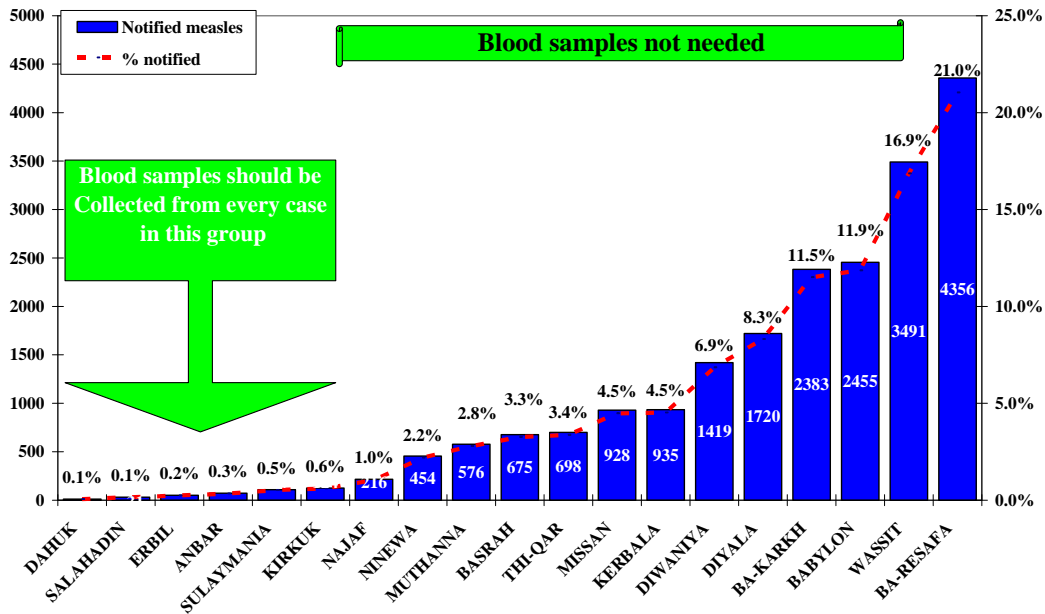


Weekly Situation Report on Measles in Iraq
No. 49- international week 17 ending 26/04/2009

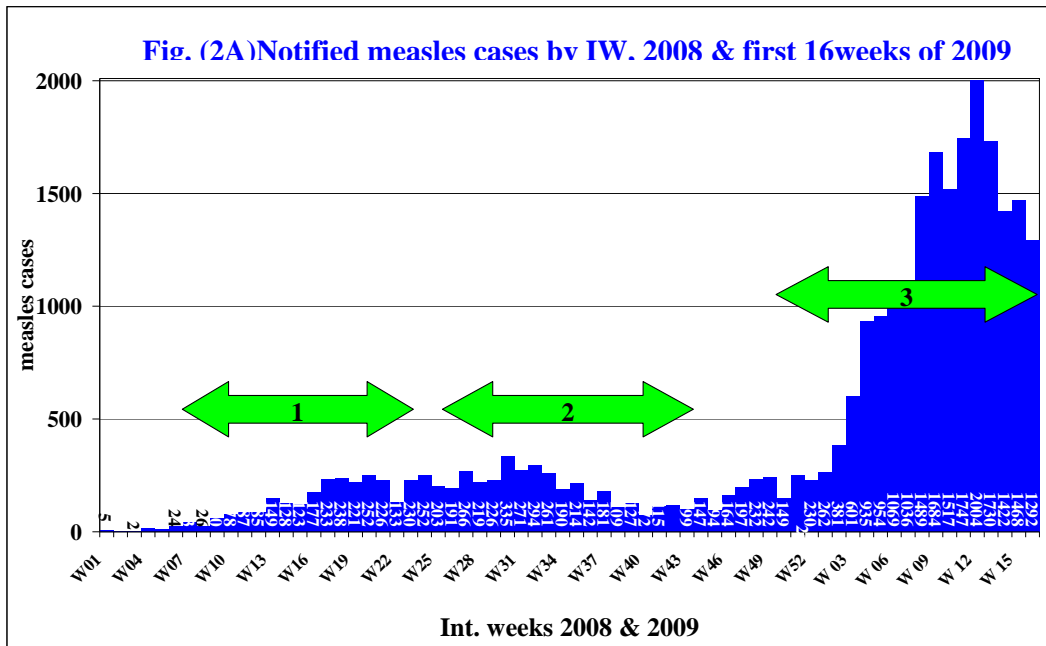
1. **Confirmed Measles cases by province:** during the first 17 weeks of 2009 , out of 20701 suspected measles cases reported in Iraq, 385 cases (2%) were reported by the 3 northern governorates. The provinces of Najaf, Anbar, Salahadin, Ninewa and Kirkuk where containment operation were done early in 2008 reported 680 (3%) cases; the majority of cases in the containment group (454 or 67%) were reported from Mosul where only selective SIAs were carried out. The 4 Southern provinces of Basra, Missan, Thiqr and Muthana reported 2877 (15%) of the total cases. The remaining 8 provinces in Central Iraq reported the remaining (16759) 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. The DoH where the outbreak is well established and many cases were confirmed by NML does 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 17 weeks of 2009



2. Notified Measles Cases by International Week:

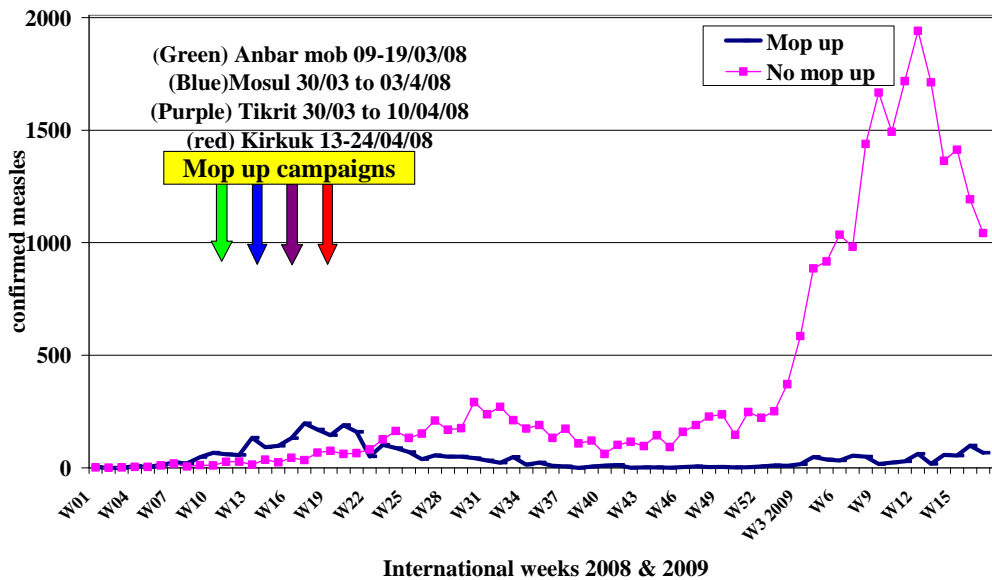
Fig. 2A illustrates notified measles cases in Iraq by week of onset, during 2008 and the first 17 weeks of 2009. In 2008 (8134) measles cases were reported compared to 20701 in the first 17 weeks of 2009. It is clear that the outbreak is on the down trend during the last 4 weeks. During this year almost 1200 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 on its down trend. A fourth and last wave is expected in the upcoming weeks, in the 3 NGs if an emergency campaign is not done.



3. 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, Diwanyia, Babil, Karbala and DIALA.

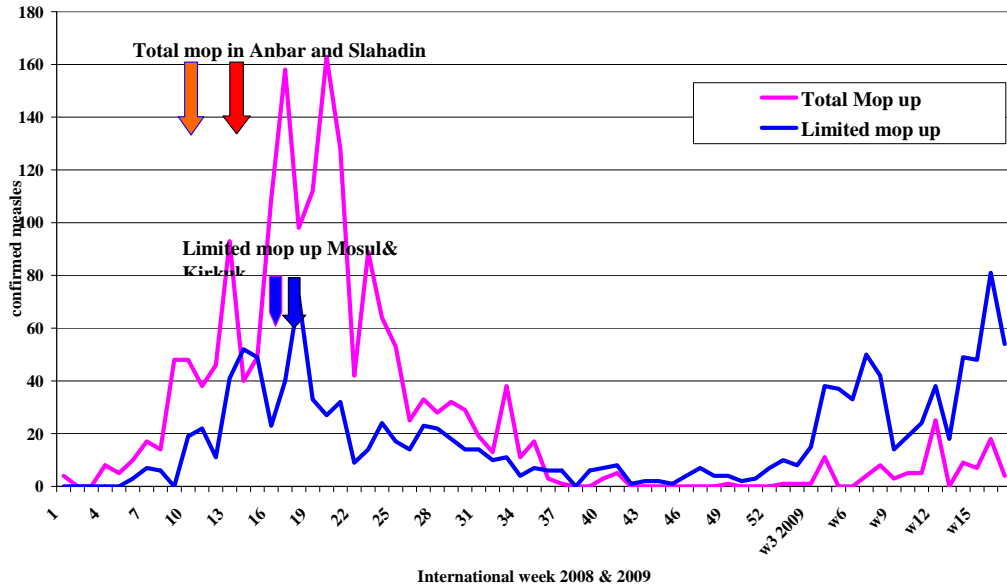
Fig (2C) shows suspected measles cases by international weeks in provinces where Mop Up operations were conducted and not conducted, Iraq, 2008 and first 17 weeks of 2009



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 (7-17 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 (28,835 reported cases in 2008 & first 17 weeks of 2009) could have been avoided if a nation wide campaign has 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



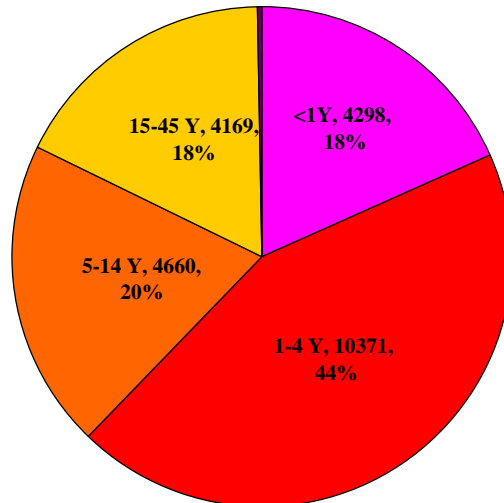
4. Measles Cases according to the Size of Mop Up campaigns.

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 suspected measles cases reported in 2008 and first 17 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 the requested support to conduct SIAs.

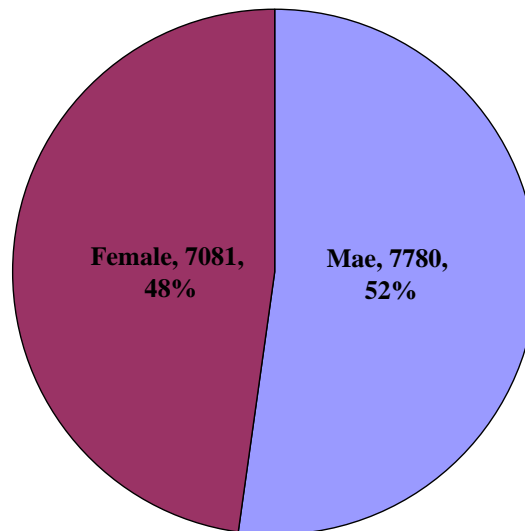
Fig. 3 notified measles cases by age group, Iraq, first 17 weeks of 2009



6. Sex Distribution:

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

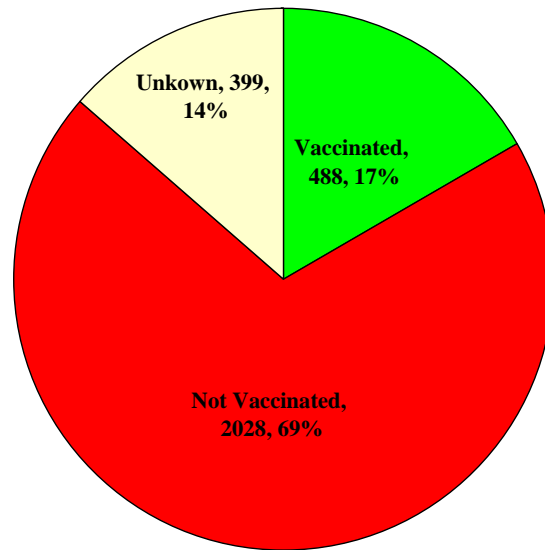
Fig. 4 Confirmed Measles by Sex, Iraq 2008 & first 17 weeks of 2009



7. Immunization Status of Notified Measles Cases in Iraq:

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

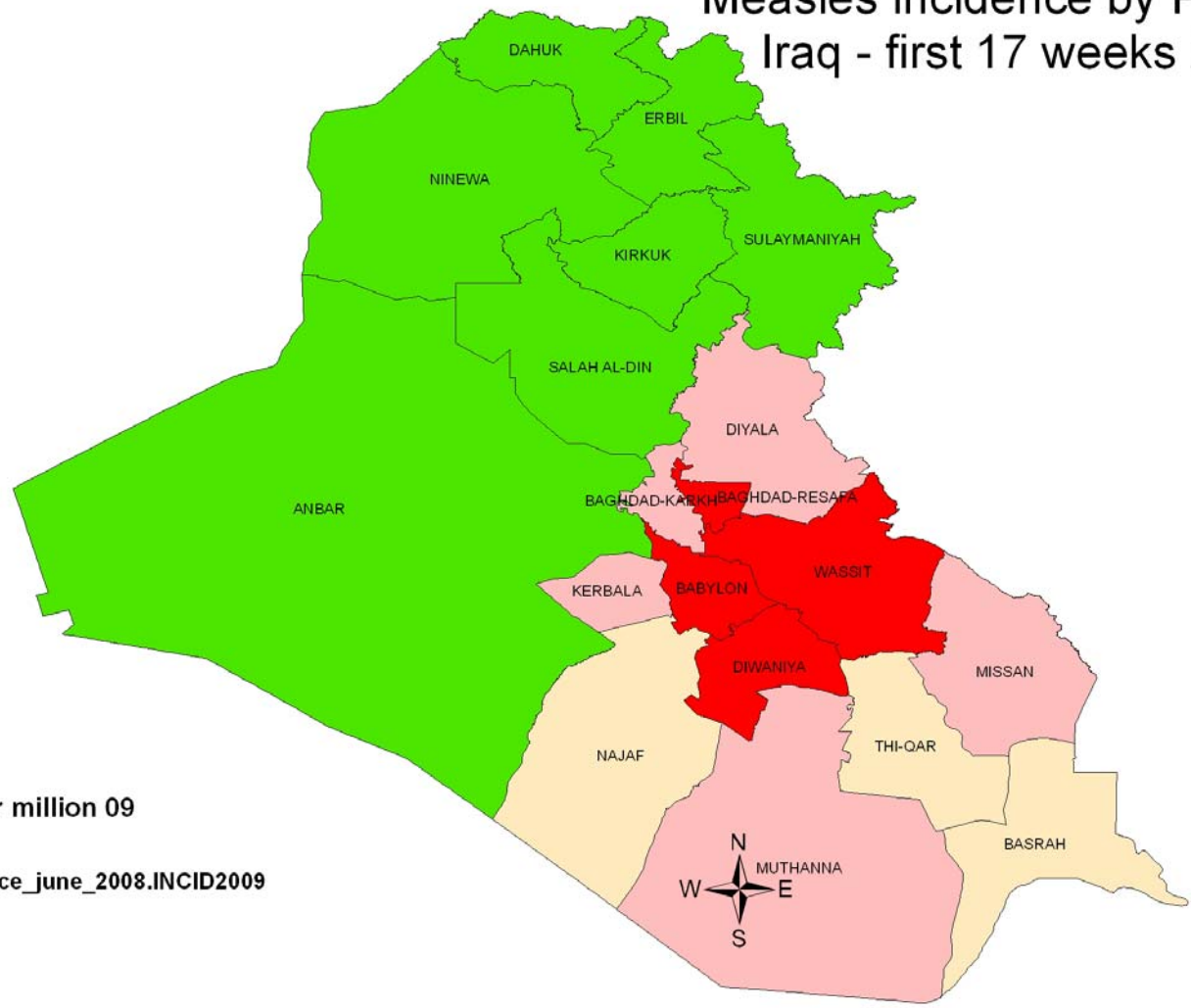
Fig. 5 confirmed measles cases among children 1-5 years of age by vaccination status, Iraq, 2008



Measles Bulletin, WHO Iraq, Cumulative measles results for 2008 and the first 17 weeks of 2009

Province	Total pop	No. of cases				Incidence per million population	
		First 16 Ws 09	2008	total	% of cases	first 17 Ws 09	2008
DAHUK	942268	11	28	39	0%	12	30
SALAHADIN	1254303	31	637	668	2%	25	508
ERBIL	1482958	51	7	58	0%	34	5
ANBAR	1483280	71	1056	1127	4%	48	712
SULAYMANIA	1547072	107	30	137	0%	69	19
KIRKUK	1027800	124	344	468	2%	121	335
NAJAF	1206264	216	68	284	1%	179	56
NINEWA	2864705	454	364	818	3%	158	127
MUTHANNA	583511	576	402	978	4%	987	689
BASRAH	2426607	675	113	788	3%	278	47
THI-QAR	1640193	698	482	1180	4%	426	294
MISSAN	834977	928	173	1101	4%	1111	207
KERBALA	930509	935	711	1646	6%	1005	764
DIWANIYA	1025253	1419	1076	2495	9%	1384	1049
DIYALA	1486547	1720	80	1800	6%	1157	54
BA-KARKH	2937300	2383	789	3172	11%	811	269
BABYLON	1625434	2455	843	3298	12%	1510	519
WASSIT	995296	3491	268	3759	14%	3507	269
BA-RESAFA	3650383	4356	663	5019	18%	1193	182
Iraq	29944660	20701	8134	28835	104%	691	272

Measles incidence by Province Iraq - first 17 weeks 2009

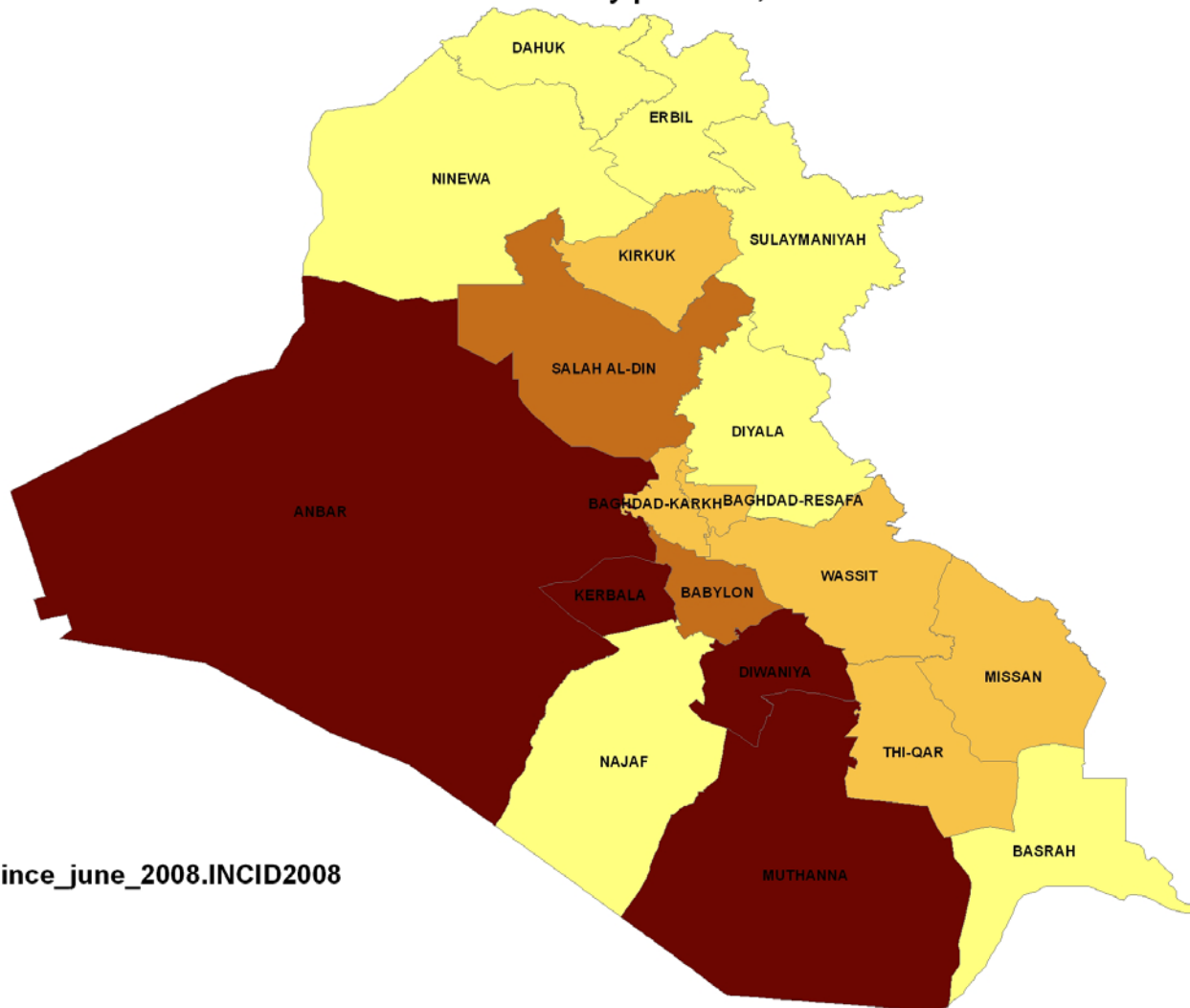


Incidence per million 09
PROVINCE
measles_province_june_2008.INCID2009

- 7 - 175
- 176 - 700
- 701 - 1173
- 1174 - 3600



Measles incidence by province, 2008



PROVINCE

measles_province_june_2008.INCID2008

- 5 - 127
- 128 - 335
- 336 - 519
- 520 - 1049

Meas



0 50 100 200 Kilometers

