



World Health  
Organization

Regional Office for the Eastern Mediterranean



# IRAQ

## MMR Vaccination Campaign

Final report

Ministry of Health (MOH) / World Health Organization - Iraq  
22 April - 10 May 2007



2007



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## **MMR Vaccination Campaign**

### **Final report**

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#### **Understanding the security and political environment**

The situation in Iraq continues to deteriorate markedly, not just in terms of the numbers of bombs exploding and corpses being found on the streets, but in terms of the nature of the violence – including the brutality of Iraqi-on-Iraqi violence. This internecine fighting is perhaps the greatest threat to the successful implementation of public health programs and consequently the social, physical and mental health of Iraqis not to forget the basic issue of preservation of some social cohesion upon which a future can be built.

Some analysts contend that the level of violence in Iraq has in fact declined, particularly since the onset of the US-led military surge designed to improve the security situation in Baghdad. However, if numbers of bomb attacks can be used as an indicator, then it can reasonably be assumed that the security situation remains as perilous as before the surge. The number of multiple fatality bombings in Iraq remained constant in March and April 2007 and, according to the Iraqi authorities, 1,500 civilians were killed in April alone. In addition to the mentioned broad security and political environment the MMR campaign was marred by the following features.

- Unlike previous campaigns, this National Immunization activity was not plagued by the usual rumors or anti-vaccination media reports or campaigns.
- 3 health workers lost their life during the campaign, 2 were ambushed while transporting MMR vaccine from Al Khalis district in Diala province to a near by health center. The third was assassinated in a health center in Haweja district in Kirkuk province. These tragic events made health workers more determined than ever to reach and vaccinate children.
- A powerful explosion in the center of Kerbala town, claiming the life of 40 Iraqi civilians, lead to the suspension of the campaign in Kerbala town for almost 2 days.
- A curfew was imposed in Samara distinct during 7 out of the 14 days of the campaign.
- The campaign was interrupted for several days in a number of health centers in Mosul, Diala and Kirkuk. Vaccination activities will be resumed once the situation normalizes in these areas.

## Achievements

On 22<sup>nd</sup> April 2007, MoH launched the MMR immunization campaign to vaccinate **3,874,667** children, aged 12 – 59 months. The campaign was preceded by **intensive** training /meetings, average 10 per DoH. Training was conducted by EPI master trainers. Members of the vaccination teams and their local supervisors were trained on technical procedure of vaccination, safety of injection, adverse events following vaccination and correct methods for storage and reconstitution of the vaccine and maintenance of cold chain. The orientation/training provided background and update information about diseases prevented by MMR vaccine. More importantly each DoH organized an average of **9** communication and social mobilization advocacy meetings for different groups in the community including: religious leaders, Youth and Women unions, health education focal points in the PHCCs and for those working in the mass media mainly journalists.



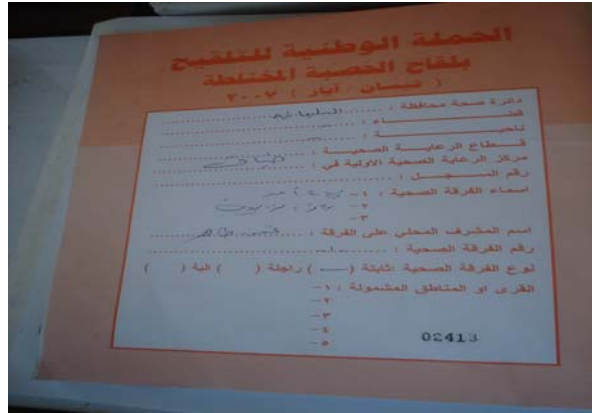
Pre-MMR training meeting in Mosul/EPI Unit



Pre-MMR training meeting in Basra/H.E. Unit

The campaign lasted for 14 days. 92% of the targeted children were reached and vaccinated through house to house visits regardless of the previous vaccination status. Vaccination was carried out by **3588 teams** {20% fixed (based in health centres), 45% on feet teams and 35% **vehicle born** teams). vaccination teams were supervised by **679** supervisors from different levels. **1978** vehicles were provided to transport the vaccination teams and the supervisors to the remote areas in each governorate. The supervisors monitored the

vaccination activities inspected the technique and safety of injection and maintenance cold chain.



Vaccination register



MMR vaccination by mobile team

The total number of children aged 12-59 months vaccinated in this

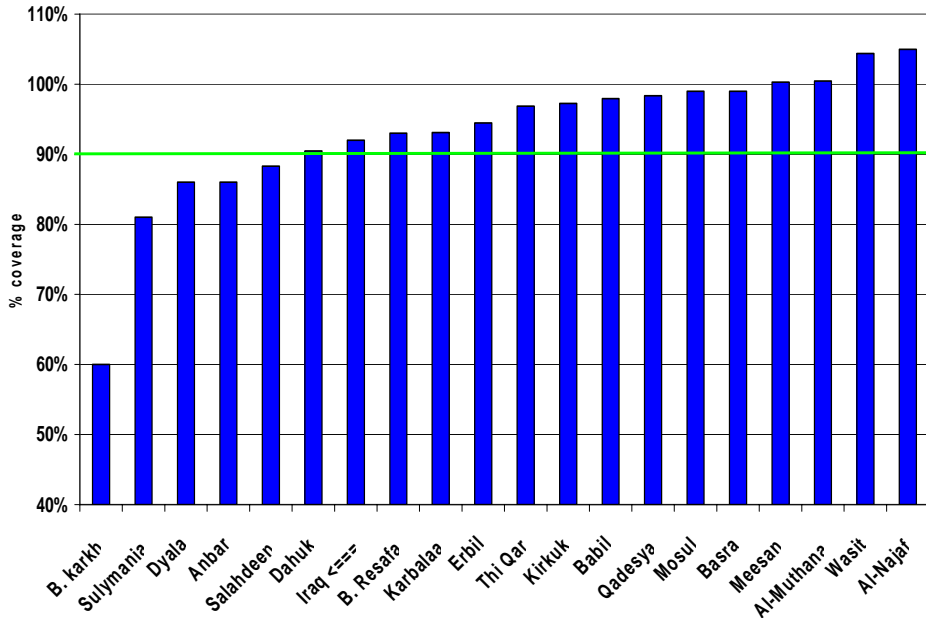
campaign was 3549529 (92%) with a range from 105% in Najaf DoH to 61% in Baghdad Kerkh (*Table and chart 1*).

**Table 1: MMR campaign, vaccination achievements by Directorate of Health (DoH)**

**22 April - 10 May 2007**

DoH	Target children	No. Vaccinated	Coverage
B. karkh	385,160	234,846	61%
Sulymania	170,178	137,028	81%
Diala	193,251	165,658	86%
Anbar	192,826	166,314	86%
Dahuk	122,496	110,826	90%
Salahdeen	163,059	147,732	91%
<b>Iraq</b>	<b>3,874,667</b>	<b>3,560,538</b>	<b>92%</b>
B. Resafa	474,550	441,704	93%
Karbala	131,300	122,219	93%
Erbil	190,994	180,435	94%
Kirkuk	121,689	118,353	97%
Qadesya	133,283	131,083	98%
Babil	211,306	208,017	98%
Basrah	315,459	312,424	99%
Mosul	372,413	370,223	99%
Meesan	112,490	112,831	100%
Muthana	75,856	76,191	100%
Thiqar	222155	225,004	101%
Wasit	129,388	135,032	104%
Najaf	156,814	164,618	105%

**Chart (1) Reported MMR campaign coverage by DoH, Iraq, 22 April-10 may 2007**



The explanation of this variation was the internal displacement of families between provinces. Families moved mainly from both Baghdad Kerkh and Diala DoH to the nearby safer provinces mainly to the south of Baghdad.

In Baghdad-Kerkh; While, a sizable unknown number of families moved to safe heavens within or out side the country, the Baghdad-Kerkh authority is still using the old denominator, moreover, the deteriorating security situation dictated mobile fixed team strategy rather than the house to house strategy . These two factors reflected a coverage of 61% which is most probably is lower than the real achievement.

Most of the vaccination teams marked the houses they visited. The mark they put included the number of children vaccinated, number of children 12-59 months age in that house, serial number of the house,

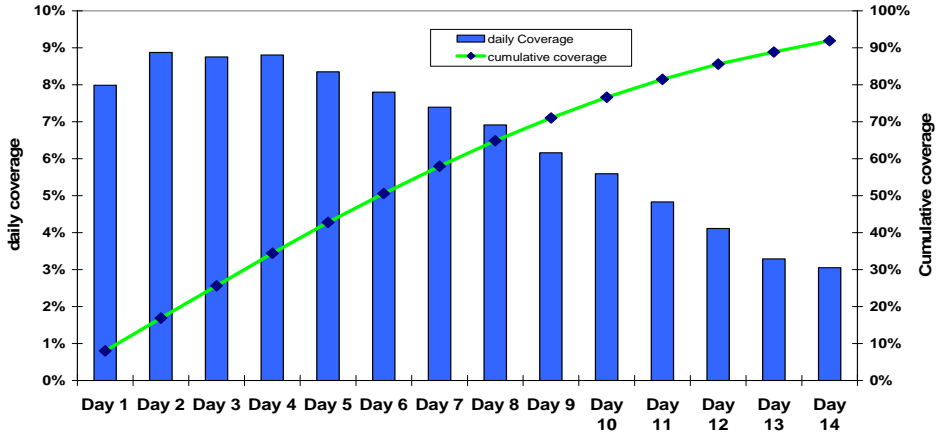
date of visit and the direction of movement of the team.



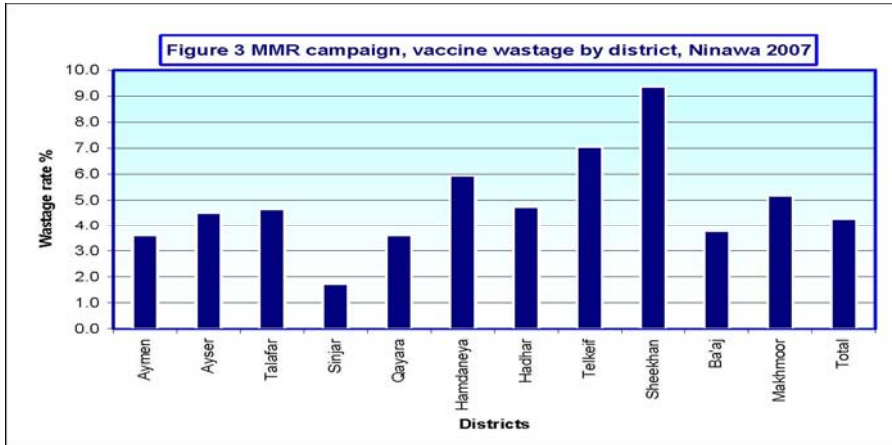
Supervisory visit by EPI manger and WHO focal point to a health center marking of houses in Mosul

The daily coverage rate ranged from 9% in the first 5days to 3 % in the last 2 days and run in a declining pattern (*Figure 2*). Most of the vaccination teams finished their work 2 days before the end date of the campaign.

chart (2) Daily and cumulative coverage, April & May, MMR campaign, Iraq



The average vaccine wastage was 5% during the same period and ranged from 3% in Tikrit to 10% in Sulymania



Maintaining the cold chain and ensuring good injection practices

There AD Syringe wastage was calculated in a few DoH with an average of less than 2% . No significant adverse events following immunization were reported. All teams were trained on managing severe reactions in the form of anaphylactic shock and were provided with sufficient drugs. The teams were also clearly instructed to inform parents about the common delayed side effects and the importance that families should consult the nearest health center if they suspect any adverse reaction.

There as good acceptance for vaccination from the community and many fixed teams reported high rate of attendance this reflects the awareness of the community regarding the immunization activities.

The percentage of children vaccinated for the first time ranged between 6% in sulymania to 4% in Mosul and Dahuk. The validity of this data is very questionable since it doesn't go with the universal low routine coverage of Measles vaccine in all DoHs. The only explanation for this discrepancy is that most vaccination teams didn't scrutinize properly the previous vaccination status of the children or the question was vague.

## Lessons learned:

- ✓ The relatively low coverage of 80% achieved in Sulymania is due to the implementation of the campaign using the mobile fixed posts strategy rather than the agreed upon house to house strategy. The only strategy that can grantee more than 90% coverage is the house to house canvassing and vaccination of children.
- ✓ Real effort is needed to urge MNFI to create corridors of peace - during NIDs- for the safe passage of vaccination teams and supervisors.
- ✓ Military operations and curfews have always been the main obstacle for reaching and vaccinating children.
- ✓ Bad security condition is still prevailing and harmfully affecting health services provision. Nevertheless, Iraqi health staff maintain their performance through modifying scenarios to complete their work e.g. working in holidays, joining two or three vaccination teams to finish the work in one place peacefully and rapidly then shift to other one, avoid marking on houses in hot or risky areas to hide the movement of the vaccination teams.
- ✓ Supervision in such vaccination campaign is very crucial to rapidly solve current problems, correct mistakes and motivate and support the vaccination staff. Assigning three supervisors from each DoH is not enough to hold this job taking in consideration that one of them, the DG probably will not act in this field.
- ✓ Social mobilization played a vital role in the high acceptance of immunization by families.
- ✓ Parents and the community in general were very supportive during the campaign which reflects their high believe in immunization program.
- ✓ There are some deficiencies in reporting and documentation. It is unbelievable that there are no adverse events from the vaccine in such big campaign and the percentage of children vaccinated for the first time was very low.