



Moving Towards Measles Eradication

"Measles eradication is achievable. If we want to do this, we can."

-- Dr. Margaret Chan, January 2010



EXECUTIVE BOARD
12th Session
Provisional agenda item 4.14

EB12/E17
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Global eradication of measles

Report by the Secretariat

1. In May 2009, the Executive Board at its 12th session reviewed an initial assessment of the feasibility of the global elimination of measles and requested a more comprehensive report in 2010.¹ This report summarizes the progress made in achieving current targets and goals and presents information on the feasibility of achieving a further goal of measles eradication. It provides an assessment of programmatic challenges to achieving measles elimination in each WHO region, and proposes milestones and intermediate targets to be attained.

2. The Strategic Advisory Group of Experts on immunization advised, in April 2009, that the term "eradication" should be used to describe worldwide interruption of measles transmission (i.e. simultaneous elimination of measles in all regions).²

PROGRESS TOWARDS THE CURRENT GLOBAL GOAL

3. The current global goal, established in the Global Immunization Vision and Strategy, is that, by 2010 or earlier, mortality due to measles will have been reduced by 90% compared to the estimated 2000 levels. Global mortality due to measles has been reduced by 78%, from an estimated 733 000 deaths in 2000 to an estimated 164 000 deaths in 2008. All WHO regions have already achieved this goal, with the exception of the South-East Asia Region, but within that Region it has been achieved by all countries except India. In 2008, global routine coverage with the first dose of measles-containing vaccine reached 83%, an increase from 75% in 2000. In 2008, more than 110 million children received measles-containing vaccines through supplementary immunization activities in the 47 priority countries³ identified as having a high measles mortality burden in 2000.

- Five out of six Regions have established target dates for elimination:
 - PAHO (2000), achieved in 2002
 - EMR (2010)
 - EUR (2010)
 - WPR (2012)
 - AFR (2020)
- SEAR:
 - Target date to be determined

Table.1
Classification of Suspect Measles, Rubella, and Congenital Rubella Syndrome (CRS) Cases for the Period of Weeks 01-07, 2010

| Subregion and Country | | Suspect Cases 2010 | Measles Confirmed 2010 | | | Year/Week Last Confir. Measles Case | Rubella Confirmed 2010 | | | Year/Week Last Confir. Rubella Case | Diagnosis of Discarded Cases 2010 | | Congenital Rubella Syndrome | | CRI * |
|-----------------------|-----|--------------------|------------------------|------|-------|-------------------------------------|------------------------|------|-------|-------------------------------------|-----------------------------------|-------|-----------------------------|-------|-------|
| | | | Clinic. | Lab. | Total | | Clinic. | Lab. | Total | | Dengue | Other | Suspect | Conf. | |
| AND | BOL | 4 | 0 | 0 | 0 | 00/40 | 0 | 0 | 0 | 06/03 | 0 | 3 | ... | ... | ... |
| | COL | 61 | 0 | 0 | 0 | 02/39 | 0 | 0 | 0 | 07/31 | 0 | 58 | 17 | 0 | ... |
| | ECU | 48 | 0 | 0 | 0 | 08/21 | 0 | 0 | 0 | 04/45 | 10 | 37 | 0 | 0 | ... |
| | PER | 35 | 0 | 0 | 0 | 08/18 | 0 | 0 | 0 | 06/45 | 0 | 22 | ... | ... | ... |
| | VEN | 2 | 0 | 0 | 0 | 07/06 | 0 | 0 | 0 | 07/34 | 0 | 2 | ... | ... | ... |
| BRA | BRA | 463 | 0 | 0 | 0 | 06/48 | 0 | 0 | 0 | 09/41 | 9 | 148 | 0 | 0 | ... |
| | CAP | ... | ... | ... | ... | 05/22 | ... | ... | ... | 01/42 | ... | ... | ... | ... | ... |
| | ELS | 11 | 0 | 0 | 0 | 01/19 | 0 | 0 | 0 | 06/30 | 3 | 8 | ... | ... | ... |
| | GUT | 10 | 0 | 0 | 0 | 08/05 | 0 | 0 | 0 | 06/30 | 0 | 10 | 5 | 0 | ... |
| | HON | 18 | 0 | 0 | 0 | 07/29 | 0 | 0 | 0 | 04/11 | 4 | 11 | 5 | 0 | ... |
| CAR | NIC | 14 | 0 | 0 | 0 | 04/14 | 0 | 0 | 0 | 04/19 | 0 | 11 | ... | ... | ... |
| | PAN | 5 | 0 | 0 | 0 | 09/49 | 0 | 0 | 0 | 02/48 | 0 | 5 | 0 | 0 | ... |
| | CAR | 26 | 0 | 0 | 0 | 08/26 | 0 | 0 | 0 | 08/18 | 0 | 20 | 0 | 0 | ... |
| | LAC | 15 | 0 | 0 | 0 | 03/27 | 0 | 0 | 0 | 04/06 | 0 | 5 | 0 | 0 | ... |
| | DOR | 0 | 0 | 0 | 0 | 01/23 | 0 | 0 | 0 | 06/44 | 0 | 0 | ... | ... | ... |
| MEX | FGU | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | GUA | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | HAI | 0 | 0 | 0 | 0 | 01/39 | 0 | 0 | 0 | 06/47 | 0 | 0 | 0 | 0 | ... |
| | MAR | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | PUR | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| NOA | MEX | 45 | 0 | 0 | 0 | 06/49 | 0 | 0 | 0 | 08/20 | 0 | 18 | 0 | 0 | ... |
| | CAN | ... | 0 | 2 | 2 | 10/04 | 0 | 0 | 0 | 09/30 | ... | ... | ... | ... | ... |
| | USA | ... | 0 | 1 | 1 | 10/05 | 0 | 1 | 1 | 10/05 | ... | ... | 0 | 0 | ... |
| SOC | ARG | 10 | 0 | 0 | 0 | 09/15 | 0 | 0 | 0 | 09/05 | 0 | 6 | 1 | 0 | ... |
| | CHI | 16 | 0 | 0 | 0 | 09/07 | 0 | 0 | 0 | 08/30 | 0 | 7 | ... | ... | ... |
| | PAR | 52 | 0 | 0 | 0 | 09/44 | 0 | 0 | 0 | 05/21 | 9 | 43 | 0 | 0 | ... |
| | URU | ... | ... | ... | ... | 08/08 | ... | ... | ... | 01/37 | ... | ... | ... | ... | ... |
| TOTAL | | 835 | 0 | 3 | 3 | -- | 0 | 1 | 1 | -- | 35 | 414 | 28 | 0 | ... |

... No report received; * Congenital rubella infection.



Measles / Rubella Surveillance

Table No.2
Infection Source of Measles and Rubella Confirmed Cases for the Period of Weeks 01-07, 2010

| Subregion and Country | | Measles | | | Rubella | | | | |
|-----------------------|-----|---------|----|---|---------|----|---|----|--|
| | | I | IR | U | I | IR | U | IN | |
| AND | BOL | | | | | | | | |
| | COL | | | | | | | | |
| | ECU | | | | | | | | |
| | PER | | | | | | | | |
| | VEN | | | | | | | | |
| BRA | BRA | | | | | | | | |
| | CAP | | | | | | | | |
| | COR | | | | | | | | |
| | ELS | | | | | | | | |
| | GUT | | | | | | | | |
| HON | HON | | | | | | | | |
| | NIC | | | | | | | | |
| | PAN | | | | | | | | |
| | CAR | CAR | | | | | | | |
| | | LAC | | | | | | | |
| CUB | | | | | | | | | |
| DOR | | | | | | | | | |
| FGU | | | | | | | | | |
| GUA | GUA | | | | | | | | |
| | HAI | | | | | | | | |
| | MAR | | | | | | | | |
| | PUR | | | | | | | | |
| | MEX | MEX | | | | | | | |
| NOA | | CAN | 2 | | | | | | |
| | | USA | 1 | | 1 | | | | |
| SOC | ARG | | | | | | | | |
| | CHI | | | | | | | | |
| | PAR | | | | | | | | |
| | URU | | | | | | | | |
| TOTAL | | 3 | | | 1 | | | | |

Table No.3
Measles/Rubella Suspect Cases Under Investigation for the Period of Weeks 01-07, 2010

| Country | Pending Cases 2009 | Cumulative 2010 | Week of Rash Onset | | | | | | |
|---------|--------------------|-----------------|--------------------|-----|-----|-----|-----|-----|-------|
| | | | 1-2 | 3 | 4 | 5 | 6 | 7 | Unkn. |
| BOL | 2 | 1 | 1 | 0 | 0 | ... | ... | ... | |
| COL | 29 | 3 | 1 | 1 | 1 | 0 | 0 | 0 | |
| ECU | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | |
| PER | 17 | 13 | 8 | 4 | 1 | ... | ... | ... | |
| VEN | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| BRA | 785 | 304 | 81 | 69 | 76 | 51 | 27 | ... | |
| COR | ... | ... | ... | ... | ... | ... | ... | ... | |
| ELS | 0 | 0 | 0 | 0 | 0 | ... | ... | ... | |
| GUT | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| HON | 0 | 3 | 2 | 0 | 0 | 0 | 1 | 0 | |
| NIC | 0 | 3 | 1 | 0 | 0 | 0 | 2 | ... | |
| PAN | 3 | 0 | 0 | 0 | 0 | 0 | ... | ... | |
| CAR | 0 | 6 | 4 | 0 | 2 | 0 | 0 | 0 | |
| CUB | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 10 | |
| DOR | 3 | 0 | 0 | ... | ... | ... | ... | ... | |
| FGU | 0 | ... | ... | ... | ... | ... | ... | ... | |
| GUA | ... | ... | ... | ... | ... | ... | ... | ... | |
| HAI | 2 | 0 | 0 | 0 | 0 | 0 | ... | ... | |
| MAR | ... | ... | ... | ... | ... | ... | ... | ... | |
| PUR | ... | ... | ... | ... | ... | ... | ... | ... | |
| MEX | 520 | 27 | 11 | 4 | 3 | 3 | 5 | 1 | |
| CAN | ... | ... | ... | ... | ... | ... | ... | ... | |
| USA | ... | ... | ... | ... | ... | ... | ... | ... | |
| ARG | 0 | 0 | 0 | 0 | 0 | 0 | ... | ... | |
| CHI | 0 | 9 | 2 | 3 | 3 | 1 | 0 | ... | |
| PAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| URU | 0 | ... | ... | ... | ... | ... | ... | ... | |
| TOTAL | 1369 | 380 | 111 | 81 | 86 | 56 | 35 | 11 | |

I: Imported; IR: Import-related; U: Unknown; IN: Indigenous

... No report received

Table No.4
Indicators of Integrated Measles/Rubella Surveillance for the Period of Weeks 01-07, 2010

| Sub-region and Country | | % Sites Reporting Weekly | % Cases with Adequate Investigation | % Cases with Adequate Sample | % Lab Received ≤5 days | % Lab Result ≤4 days | % Cases Discarded by Lab | Chains of Transmission With Representative Samples for Viral Isolation | | |
|------------------------|-----|--------------------------|-------------------------------------|------------------------------|------------------------|----------------------|--------------------------|--|---------|--|
| | | | | | | | | Measles | Rubella | |
| AND | BOL | ... | 100 | 100 | 100 | 67 | 100 | | | |
| | COL | ... | 77 | 95 | 93 | 98 | 100 | | | |
| | ECU | 96 | 69 | 100 | 94 | 98 | 100 | | | |
| | PER | ... | 91 | 94 | 70 | 52 | 100 | | | |
| | VEN | ... | 0 | 100 | 100 | 0 | 100 | | | |
| BRA | BRA | 70 | ... | ... | ... | ... | ... | | | |
| | CAP | ... | ... | ... | ... | ... | ... | | | |
| | COR | ... | ... | ... | ... | ... | ... | | | |
| | ELS | ... | 75 | 100 | 100 | 91 | 100 | | | |
| | GUT | ... | 27 | 100 | 67 | 100 | 100 | | | |
| HON | HON | 91 | 94 | 100 | 83 | 89 | 100 | | | |
| | NIC | 100 | 86 | 93 | 93 | 57 | 100 | | | |
| | PAN | 91 | 60 | 100 | 100 | 100 | 100 | | | |
| | CAR | CAR | 99 | 42 | 81 | 30 | 80 | 100 | | |
| | | LAC | CUB | 100 | 100 | 100 | 100 | 100 | 33 | |
| DOR | | 97 | ... | ... | ... | ... | ... | | | |
| FGU | | ... | ... | ... | ... | ... | ... | | | |
| GUA | | ... | ... | ... | ... | ... | ... | | | |
| HAI | HAI | 100 | ... | ... | ... | ... | ... | | | |
| | MAR | ... | ... | ... | ... | ... | ... | | | |
| | PUR | ... | ... | ... | ... | ... | ... | | | |
| | MEX | MEX | 100 | 100 | 100 | 78 | 94 | 100 | | |
| | | NOA | CAN | ... | ... | ... | ... | ... | ... | |
| USA | | | ... | ... | ... | ... | ... | ... | | |
| SOC | ARG | 30 | ... | ... | ... | ... | ... | | | |
| | CHI | 97 | 6 | 69 | 69 | 100 | 100 | | | |
| | PAR | 85 | 67 | 98 | 92 | 100 | 100 | | | |
| | URU | ... | ... | ... | ... | ... | ... | | | |
| Total and Average | | 87 | 74 | 95 | 83 | 90 | 97 | | | |

... No report received.