



WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit
Ministry of Health

231, de Saram Place, Colombo 01000, Sri Lanka
Tele: + 94 11 2695112, Fax: +94 11 2696583, E mail: epidunit@sltnet.lk
Epidemiologist: +94 11 2681548, E mail: chepid@sltnet.lk
Web: <http://www.epid.gov.lk>

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Global Control and Regional Elimination of Measles, 2000 – 2011

Widespread use of measles vaccine since 1980 has led to a substantial decline in global measles morbidity and mortality; measles elimination has been achieved and sustained in the World Health Organization (WHO) Region of the Americas (AMR) since 2002. In 2010, the World Health Assembly established three milestones for measles eradication by 2015:

- Increase routine coverage with the first dose of measles-containing vaccine (MCV1) for children aged 1 year to $\geq 90\%$ nationally and $\geq 80\%$ in every district or

equivalent administrative unit

- Reduce and maintain annual measles incidence to < 5 cases per million
- Reduce measles mortality by 95% from the 2000 estimate.

The Global Vaccine Action Plan (GVAP) includes monitoring progress toward achievement of goals to reduce or eliminate measles in four WHO regions by 2015 and five WHO regions by 2020.

Estimated global MCV1 coverage increased from 72% in 2000 to 84% in 2011 and the

Table 1. Estimates of coverage with the first dose of measles-containing vaccine (MCV1) administered through routine immunization services among children aged 1 year, reported measles cases, and incidence, by World Health Organization (WHO) region, 2011 (Source-WHO)

| WHO region | % coverage with MCV 1 | No. of reported measles cases | % decline from 2000 | Measles incidence (cases per million population) | % decline from 2000 | % countries with incidence < 5 per million | Estimated measles deaths | | % mortality reduction 2000 to 2011 | % total measles deaths in 2011 |
|-----------------------------------|-----------------------|-------------------------------|---------------------|--|---------------------|--|--------------------------|---------------------------|------------------------------------|--------------------------------|
| | | | | | | | No. | (95% confidence interval) | | |
| African | 75 | 194,364 | 63 | 227 | 73 | 46 | 55,000 | (23,000–338,000) | 84 | 35 |
| Americas | 92 | 1,372 | 22 | 1.5 | 31 | 94 | < 100 | — | — | 0 |
| Eastern Mediterranean | 83 | 35,923 | 7 | 61 | 31 | 45 | 30,000 | (19,000–56,000) | 45 | 19 |
| European | 94 | 37,073 | 1 | 43 | 14 | 44 | 100 | (0–180) | 62 | 0 |
| South-East Asia | 79 | 65,161 | 17 | 36 | 30 | 27 | 71,000 | (52,000–100,000) | 52 | 45 |
| South-East Asia (excluding India) | 93 | 35,822 | 10 | 61 | 24 | 30 | 15,000 | (8,000–30,000) | 70 | 9 |
| India | 74 | 29,339 | 24 | 24 | 36 | 0 | 56,000 | (44,000–70,000) | 36 | 35 |
| Western Pacific | 96 | 21,050 | 88 | 12 | 89 | 62 | 1,000 | (200–30,000) | 90 | 1 |
| Total | 84 | 354,922 | 58 | 52 | 65 | 55 | 158,000 | (94,000–527,000) | 71 | 100 |

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number of countries providing a second dose of measles-containing vaccine (MCV2) through routine services increased from 97 (50%) in 2000 to 141 (73%) in 2011. During 2000–2011, annual reported measles incidence decreased 65%, from 146 to 52 cases per 1 million population and estimated measles deaths decreased 71%, from 542,000 to 158,000. However, during 2010–2011, measles incidence increased and large outbreaks of measles were reported in multiple countries. To resume progress toward achieving regional measles elimination targets, national governments and partners are urged to ensure that measles elimination efforts receive high priority and adequate resources.

Immunization Activities

WHO and the United Nations Children's Fund (UNICEF) use annual data from administrative records and surveys reported by national governments to estimate MCV1 coverage among children aged 1 year. Since 2003, countries also have reported the number of districts with ≥80% MCV1 coverage. For 2011, estimated MCV1 coverage in three WHO regions was ≥90%. The number of countries with ≥90% MCV1 coverage increased from 83 (43%) in 2000 to 123 (63%) in 2011. Of countries reporting district-level MCV1 coverage, the proportion reaching ≥80% MCV1 coverage in ≥80% of districts increased from 49% in 2003 to 56% in 2011; in 2011, 34% reported ≥80% MCV1 coverage in all districts. Of the estimated 20.1 million infants who did not receive MCV1 in 2011 through routine immunization services, 11.1 million (55%) were in five countries: India (6.7 million), Nigeria (1.7 million), Ethiopia (1.0 million), Pakistan (0.9 million), and the Democratic Republic of the Congo (0.8 million).

225 million children received measles vaccination during 39 supplemental immunization activities (SIAs) conducted during 2011.

Disease Incidence

During 2000–2011, the number of measles cases reported worldwide each year decreased 58%, from 853,480 to 354,922 and measles incidence decreased 65%, from 146 to 52 cases per million population per year, with declining cases and incidence reported in all WHO regions (Table 1).

Mortality Estimates

Many countries, particularly those with the highest disease burden, lack data on the number of measles deaths; therefore, WHO has developed a model to estimate mortality using reported numbers of cases, measles vaccination coverage through routine vaccination and SIAs, the age distribution of reported cases and age-specific, country-specific case-fatality ratios. The addition of 2011 measles vaccination coverage and case data for all countries, and updating of data for the period before 2011 for some countries, led to new mortality estimates for 2000–2011. During 2000–2011, estimated measles deaths decreased 71%, from 542,000 to 158,000; all regions and India had substantial reductions in estimated measles mortality, ranging from 36% to 90% (Table 1).

Note-Sri Lanka has achieved the country goal of ≥90% coverage (MCV1) for children aged 1 year and ≥80% coverage in every district
 Source-Global Control and Regional Elimination of Measles, 2000–2011,

available from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6202a3.htm?s_cid=mm6202a3

Compiled by Dr. Madhava Gunasekera of the Epidemiology Unit

Invasive Bacterial Disease surveillance in Sentinel Sites- 4th quarter 2012

| | |
|--|----|
| No. of suspected meningitis cases | 28 |
| No. of probable meningitis cases | 9 |
| Percentage (%) of CSF samples tested positive for organisms | 0% |
| No. of children who met the pneumonia case definition | 68 |
| Percentage (%) of Pneumonia cases with positive blood cultures | 0% |
| No. of sepsis cases | 15 |
| Percentage (%) of Sepsis cases with positive blood cultures | 0% |
| Source-LRH, Epidemiology Unit | |

Rota virus surveillance in Sentinel Sites –4thquarter 2012

| | |
|---|--------|
| Number of acute diarrhoea hospitalizations in children <5 years | 378 |
| Number of stool specimen collected | 284 |
| Number of stool specimen tested positive for rotavirus | 16 |
| Percentage (%) of stool specimen tested positive for rotavirus | 05.6 % |
| Source-MRI, Epidemiology Unit | |

Water Quality Surveillance

Number of microbiological water samples - December / 2012

| District | MOH areas | No: Expected * | No: Received |
|--------------|-----------|----------------|--------------|
| Colombo | 12 | 72 | 46 |
| Gampaha | 15 | 90 | 3 |
| Kalutara | 12 | 72 | 25 |
| NHIS | 2 | 12 | 18 |
| Kandy | 23 | 138 | 0 |
| Matale | 12 | 72 | 14 |
| Nuwara Eliya | 13 | 78 | 0 |
| Galle | 19 | 114 | NR |
| Matara | 17 | 102 | 5 |
| Hambantota | 12 | 72 | NR |
| Jaffna | 11 | 66 | 0 |
| Kilinochchi | 4 | 24 | 16 |
| Manner | 5 | 30 | 13 |
| Vavuniya | 4 | 24 | 17 |
| Mullatvu | 4 | 24 | 0 |
| Batticaloa | 14 | 84 | 15 |
| Ampara | 7 | 42 | NR |
| Trincomalee | 11 | 66 | 5 |
| Kurunegala | 23 | 138 | 65 |
| Puttalam | 9 | 84 | 19 |
| Anuradhapura | 19 | 114 | 24 |
| Polonnaruwa | 7 | 42 | 0 |
| Badulla | 15 | 90 | 40 |
| Moneragala | 11 | 66 | 70 |
| Rathnapura | 18 | 108 | NR |
| Kegalle | 11 | 66 | 4 |
| Kalmunai | 13 | 78 | 0 |

* No of samples expected (6 / MOH area / Month)
 NR = Return not received

Table 1: Vaccine-preventable Diseases & AFP

12th - 18th January 2013 (03rd Week)

| Disease | No. of Cases by Province | | | | | | | | | Number of cases during current week in 2013 | Number of cases during same week in 2012 | Total number of cases to date in 2013 | Total number of cases to date in 2012 | Difference between the number of cases to date in 2013 & 2012 |
|-------------------------|--------------------------|----|----|----|----|----|----|----|-----|---|--|---------------------------------------|---------------------------------------|---|
| | W | C | S | N | E | NW | NC | U | Sab | | | | | |
| Acute Flaccid Paralysis | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 01 | 02 | 02 | 08 | - 75.0 % |
| Diphtheria | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | - | - | - | - | - |
| Measles | 01 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 01 | 12 | 01 | +1100.0 % |
| Tetanus | 01 | 00 | 00 | 00 | 01 | 00 | 00 | 00 | 00 | 02 | 01 | 02 | 01 | + 100.0 % |
| Whooping Cough | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 00 | 00 | 01 | 02 | 05 | 05 | 0 % |
| Tuberculosis | 21 | 23 | 10 | 01 | 09 | 00 | 00 | 18 | 14 | 96 | 157 | 492 | 726 | - 32.2 % |

Table 2: Newly Introduced Notifiable Disease

12th - 18th January 2013 (03rd Week)

| Disease | No. of Cases by Province | | | | | | | | | Number of cases during current week in 2013 | Number of cases during same week in 2012 | Total number of cases to date in 2013 | Total number of cases to date in 2012 | Difference between the number of cases to date in 2013 & 2012 |
|---------------|--------------------------|----|------------|------------|------------|------------|-------------|------------|------------|---|--|---------------------------------------|---------------------------------------|---|
| | W | C | S | N | E | NW | NC | U | Sab | | | | | |
| Chickenpox | 10 | 00 | 10 | 03 | 02 | 02 | 03 | 04 | 09 | 43 | 57 | 202 | 205 | - 1.5 % |
| Meningitis | 03 KL=1 GM=2 | 00 | 03 GL=3 | 02 VU=2 | 00 | 04 KG=4 | 02 AP=2 | 01 BD=1 | 02 RP=2 | 17 | 06 | 65 | 41 | + 58.5 % |
| Mumps | 09 | 01 | 02 | 02 | 00 | 03 | 01 | 00 | 04 | 22 | 57 | 88 | 240 | - 63.3 % |
| Leishmaniasis | 00 | 00 | 02 HB=2 | 00 | 01 TR=1 | 00 | 13 AP=13 | 00 | 00 | 16 | 27 | 56 | 44 | + 27.3 % |

Key to Table 1 & 2

Provinces: W: Western, C: Central, S: Southern, N: North, E: East, NC: North Central, NW: North Western, U: Uva, Sab: Sabaragamuwa.
DPDHS Divisions: CB: Colombo, GM: Gampaha, KL: Kalutara, KD: Kandy, ML: Matale, NE: Nuwara Eliya, GL: Galle, HB: Hambantota, MT: Matara, JF: Jaffna, KN: Killinochchi, MN: Mannar, VA: Vavuniya, MU: Mullaitivu, BT: Batticaloa, AM: Ampara, TR: Trincomalee, KM: Kalmunai, KR: Kurunegala, PU: Puttalam, AP: Anuradhapura, PO: Polonnaruwa, BD: Badulla, MO: Moneragala, RP: Ratnapura, KG: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps.

Special Surveillance: Acute Flaccid Paralysis.

Leishmaniasis is notifiable only after the General Circular No: 02/102/2008 issued on 23 September 2008. .

| Influenza Surveillance in Sentinel Hospitals - ILI & SARI | | | | | | | | | |
|---|-------------|----------------|--------|--------------|---------|-----|----------------|---------------|-----------|
| Month | Human | | | | | | Animal | | |
| | No Received | Infl A untyped | Infl B | A(H1N1)pdm09 | A(H3N2) | RSV | Pooled samples | Serum Samples | Positives |
| December | 234 | 12 | 18 | 05 | 23 | 0 | 159 | 60 | 0 |

Source: Medical Research Institute & Veterinary Research Institute

Dengue Prevention and Control Health Messages

Check the roof gutters regularly for water collection where dengue mosquitoes could breed.

Table 4: Selected notifiable diseases reported by Medical Officers of Health
12th - 18th January 2013 (03rd Week)

| DPDHS Division | Dengue Fever / DHF* | | Dysentery | | Encephalitis | | Enteric Fever | | Food Poisoning | | Leptospirosis | | Typhus Fever | | Viral Hepatitis | | Human Rabies | | Returns Received |
|------------------|---------------------|-------------|-----------|------------|--------------|-----------|---------------|-----------|----------------|-----------|---------------|------------|--------------|-----------|-----------------|------------|--------------|-----------|------------------|
| | A | B | A | B | A | B | A | B | A | B | A | B | A | B | A | B | A | B | % |
| Colombo | 109 | 460 | 5 | 8 | 0 | 0 | 4 | 8 | 2 | 3 | 1 | 9 | 0 | 1 | 0 | 4 | 0 | 0 | 69 |
| Gampaha | 59 | 286 | 2 | 5 | 0 | 3 | 2 | 3 | 0 | 0 | 1 | 3 | 1 | 3 | 8 | 17 | 0 | 0 | 53 |
| Kalutara | 35 | 105 | 6 | 11 | 2 | 3 | 1 | 6 | 0 | 0 | 4 | 24 | 0 | 1 | 1 | 1 | 0 | 0 | 85 |
| Kandy | 0 | 19 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Matale | 7 | 36 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 0 | 0 | 58 |
| Nuwara | 3 | 9 | 1 | 4 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 3 | 6 | 0 | 0 | 0 | 0 | 62 |
| Galle | 17 | 43 | 2 | 3 | 2 | 2 | 0 | 0 | 0 | 1 | 2 | 8 | 1 | 3 | 0 | 0 | 0 | 0 | 79 |
| Hambantota | 6 | 24 | 3 | 5 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 8 | 0 | 5 | 0 | 13 | 0 | 0 | 83 |
| Matara | 11 | 32 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 3 | 8 | 0 | 1 | 8 | 41 | 0 | 0 | 100 |
| Jaffna | 12 | 79 | 3 | 15 | 0 | 1 | 5 | 41 | 0 | 0 | 0 | 0 | 17 | 56 | 1 | 1 | 0 | 0 | 100 |
| Kilinochchi | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| Mannar | 4 | 20 | 0 | 4 | 0 | 0 | 3 | 5 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| Vavuniya | 5 | 11 | 1 | 6 | 4 | 4 | 0 | 1 | 0 | 2 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| Mullaitivu | 5 | 11 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 80 |
| Batticaloa | 8 | 25 | 1 | 10 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 71 |
| Ampara | 2 | 8 | 2 | 12 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| Trincomalee | 7 | 15 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 8 | 0 | 1 | 0 | 0 | 0 | 0 | 67 |
| Kurunegala | 51 | 410 | 2 | 19 | 0 | 0 | 0 | 6 | 0 | 0 | 2 | 6 | 1 | 3 | 1 | 2 | 0 | 0 | 65 |
| Puttalam | 40 | 101 | 2 | 7 | 1 | 1 | 1 | 2 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 75 |
| Anuradhapu | 14 | 61 | 0 | 3 | 3 | 4 | 0 | 0 | 0 | 0 | 6 | 8 | 0 | 3 | 0 | 2 | 0 | 0 | 68 |
| Polonnaruw | 7 | 13 | 1 | 8 | 0 | 0 | 1 | 2 | 0 | 0 | 7 | 14 | 0 | 0 | 1 | 1 | 0 | 0 | 86 |
| Badulla | 6 | 22 | 1 | 8 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 1 | 0 | 3 | 2 | 5 | 0 | 0 | 65 |
| Monaragala | 2 | 22 | 1 | 6 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 4 | 0 | 2 | 0 | 2 | 0 | 0 | 27 |
| Ratnapura | 26 | 76 | 4 | 23 | 4 | 18 | 3 | 5 | 0 | 2 | 0 | 8 | 1 | 1 | 18 | 26 | 1 | 1 | 72 |
| Kegalle | 18 | 89 | 2 | 4 | 1 | 2 | 1 | 2 | 0 | 1 | 2 | 7 | 1 | 2 | 1 | 15 | 0 | 0 | 82 |
| Kalmune | 14 | 60 | 2 | 5 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 46 |
| SRI LANKA | 468 | 2040 | 41 | 189 | 18 | 41 | 25 | 91 | 02 | 16 | 48 | 131 | 27 | 93 | 43 | 141 | 01 | 01 | 65 |

Source: Weekly Returns of Communicable Diseases WRCD). 0

*Dengue Fever / DHF refers to Dengue Fever / Dengue Haemorrhagic Fever.

**Timely refers to returns received on or before 18th January, 2013 Total number of reporting units 329. Number of reporting units data provided for the current week: 229

A = Cases reported during the current week. B = Cumulative cases for the year.

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Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to chepid@sltnet.lk.

ON STATE SERVICE

Dr. P. PALIHAWADANA
CHIEF EPIDEMIOLOGIST
EPIDEMIOLOGY UNIT
231, DE SARAM PLACE
COLOMBO 10