

WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit
Ministry of Healthcare and Nutrition

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Influenza Surveillance

Human Influenza has been prevalent in our country from ancient times. However the epidemiology of the disease was unknown because there was no established surveillance network to collect data regarding the disease. With the potential threat of spreading Avian Influenza (AI) globally, Pandemic Influenza Preparedness and Response activities in the country began in 2006. As a result, Human Influenza surveillance has been initiated in the following 20 hospitals identified as sentinel surveillance sites for Avian Influenza.

| | |
|-----------------|-----------------|
| LRH | TH Kandy |
| IDH | TH Batticaloa |
| NHSL | TH Jaffna |
| TH Kalubowila | TH Badulla |
| TH Peradeniya | TH Anuradhapura |
| TH Ratnapura | BH Polonnaruwa |
| TH Kurunegala | TH Ragama |
| SJGH | BH Chilaw |
| BH Vavuniya | TH Karapitiya |
| BH Nuwara Eliya | GH Matara |

These hospitals are mostly tertiary hospitals in identified high risk districts for possible AI transmission. An effective epidemiological and laboratory surveillance of influenza cases attending the Out Patient Departments (OPD) and wards of these institutions are expected to send specimens from patients suspected of Influenza like illness (ILI) or any other respiratory viral infection to the Medical Research Institute (MRI). Each hospital is expected to send at least 30 respiratory samples from these patients to the National Influenza Centre, MRI every month where they are tested for influenza viruses to identify the current circulating influenza strains in the country.

Influenza Surveillance Network

These hospitals are also expected to send

weekly data returns on the influenza patients to the Epidemiology Unit where the data are entered into a database for further analysis. Format of this return is given below.

Weekly Reporting of ILI

Hospital staff especially those in the OPD and wards are being trained on AI preparedness and on influenza surveillance and influenza surveillance activities in these sentinel hospitals are periodically reviewed by the Epidemiology Unit.

Patients with at least 6 of the following criteria should be included in the surveillance in a non-epidemic period. Those with at least 4 criteria should be included during an influenza epidemic.

Criteria for selection of patients for ILI (Influenza like Illness)

1. Acute onset (at least within 4 days)
2. Cough
3. Fever
4. Rigors or chills
5. Myalgia
6. Prostration / weakness
7. Redness of throat
8. Similar illness in close contacts

Type of specimens to collect from the selected patients are as follows

Naso-Pharyngeal Aspirate (to be collected using a mucous extractor)

Nasal wash

Nasal and throat swabs (1 throat and 2 nasal swabs per patient)

Post mortem specimen from lung tissue (Tru cut needle biopsy)

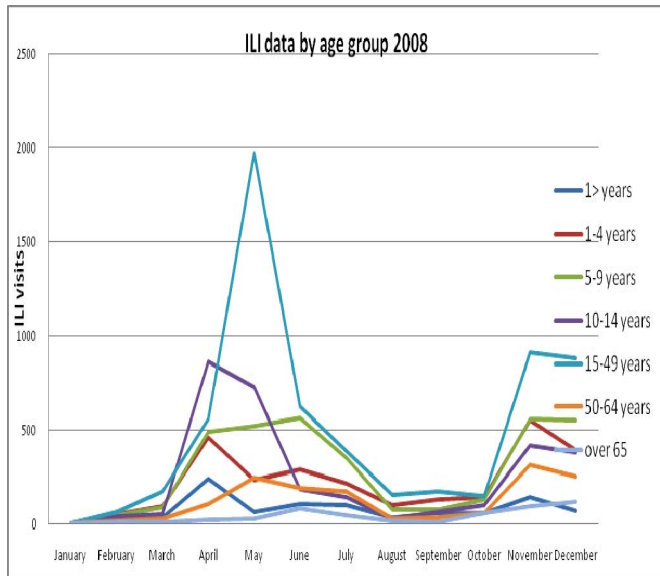
Transport of Specimens

Specimen should be packed in ice and transported to the MRI in viral transport medium (available on request from MRI).

Influenza Like Illness Surveillance – 2008

During year 2008, 2355 clinical samples from ILI patients were tested at the MRI. The following table summarizes the types of virus isolated from these samples.

| Contents | Page |
|------------------------------------------------------------------------------------------------------------|------|
| 1. Leading Article - Influenza Surveillance | 1 |
| 2. Surveillance of vaccine preventable diseases & AFP (05 th - 11 th September 2009) | 3 |
| 3. Summary of newly introduced notifiable diseases (05 th - 11 th September 2009) | 3 |
| 4. Surveillance of Communicable diseases among IDP's (05 th - 11 th September 2009) | 3 |
| 5. Summary of selected notifiable diseases reported (05 th - 11 th September 2009) | 4 |



Following graph summarizes the monthly distribution of ILI visits to the sentinel sites during year 2008, according to age groups.

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Influenza Like Illness Surveillance – 2008

During year 2008, 2355 clinical samples from ILI patients were tested at the MRI. The following table summarizes the types of virus isolated from these samples.

Table 1. Types of Viruses Isolated –2008

The following table summarizes the monthly distribution of ILI visits to the sentinel sites during year 2008, according to age groups.

| Month | No of Samples | Ade no | Inf . A | Inf . B | Para Influenza | RS V | H1N 1 | H3N2 |
|--------------|---------------|-----------|-----------|-----------|----------------|-----------|-----------|-----------|
| Jan | 132 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Feb | 209 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| March | 186 | 2 | 2 | 1 | 1 | 0 | 0 | 1 |
| April | 186 | 3 | 10 | 2 | 2 | 6 | 0 | 9 |
| May | 204 | 4 | 10 | 0 | 1 | 6 | 0 | 9 |
| June | 179 | 3 | 2 | 0 | 1 | 19 | 0 | 0 |
| July | 211 | 6 | 0 | 0 | 0 | 10 | 0 | 0 |
| Aug | 183 | 3 | 0 | 0 | 0 | 5 | 0 | 0 |
| Sep | 185 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oct | 174 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nov | 236 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Dec | 270 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 2355 | 21 | 24 | 04 | 08 | 46 | 00 | 19 |

Types of specimen to be collected from selected patients are as follows

- Naso-Pharyngeal Aspirate (to be collected using a mucous extractor)
- Nasal wash
- Nasal and throat swabs (1 throat and 2 nasal swabs per patient)
- Post mortem specimen from lung tissue (Tru cut needle biopsy)

Transport of Specimens

Specimen should be packed in ice and transported to the MRI in viral transport medium (available on request from MRI).

Editor wishes to thank Dr Wasu Jayasinghe, Medical Officer, Epidemiology Unit, Colombo, for her contribution to this article.

| | | | | | | | | | | | | | | | | |
|------------------------------|----------------------|----------------|-------------|-----------|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|
| District | | Week Ending | | | | | | | | | | | | | | |
| Sentinel Hospital | | Date of Report | | | | | | | | | | | | | | |
| Date (Day, week) | Number of New Visits | | | | | | | | | | | | | | | |
| | Total | | < 1 year | | 1 – 4 years | | 5-9 years | | 10-14 years | | 15-49 years | | 50-64 years | | Over 65 | |
| | Total Visit | ILI | Total Visit | ILI | Total Visit | ILI | Total Visit | ILI | Total Visit | ILI | Total Visit | ILI | Total Visit | ILI | Total Visit | ILI |
| Monday | | | | | | | | | | | | | | | | |
| Tuesday | | | | | | | | | | | | | | | | |
| Wednesday | | | | | | | | | | | | | | | | |
| Thursday | | | | | | | | | | | | | | | | |
| Friday | | | | | | | | | | | | | | | | |
| Saturday | | | | | | | | | | | | | | | | |
| Sunday | | | | | | | | | | | | | | | | |
| Total for Week | | | | | | | | | | | | | | | | |
| Population | | | | | | | | | | | | | | | | |
| Incidence Rate (per 100,000) | | | | | | | | | | | | | | | | |
| ICN | | | | Signature | | | | | | | | | | | | |

Table 1: Vaccine-preventable Diseases & AFP

05th-11th September 2009 (37thWeek)

| Disease | No. of Cases by Province | | | | | | | | | Number of cases during current week in 2009 | Number of cases during same week in 2008 | Total number of cases to date in 2009 | Total number of cases to date in 2008 | Difference between the number of cases to date in 2009 & 2008 |
|-------------------------|--------------------------|----|----|----|----|----|----|----|-----|---------------------------------------------|------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------------------------------|
| | W | C | S | N | E | NW | NC | U | Sab | | | | | |
| Acute Flaccid Paralysis | 01 | 00 | 01 | 00 | 00 | 00 | 00 | 00 | 01 | 03 | 01 | 56 | 71 | -21.1% |
| Diphtheria | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | - |
| Measles | 00 | 00 | 00 | 04 | 00 | 01 | 02 | 00 | 00 | 07 | 02 | 141 | 92 | +53.3% |
| Tetanus | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 19 | 27 | -29.6% |
| Whooping Cough | 00 | 00 | 00 | 01 | 01 | 00 | 00 | 00 | 02 | 04 | 02 | 49 | 38 | +28.9% |
| Tuberculosis | 62 | 82 | 03 | 25 | 19 | 01 | 03 | 00 | 41 | 236 | 258 | 7352 | 6636 | 10.8% |

Table 2: Newly Introduced Notifiable Disease

05th-11th September 2009 (37thWeek)

| Disease | No. of Cases by Province | | | | | | | | | Number of cases during current week in 2009 | Number of cases during same week in 2008 | Total number of cases to date in 2009 | Total number of cases to date in 2008 | Difference between the number of cases to date in 2009 & 2008 |
|---------------|--------------------------|----|-------------|------------|--------------------|---------------------|------------|----|--------------------|---------------------------------------------|------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------------------------------|
| | W | C | S | N | E | NW | NC | U | Sab | | | | | |
| Chickenpox | 17 | 12 | 08 | 225 | 07 | 03 | 05 | 07 | 10 | 294 | 114 | 12666 | 3906 | +224.3% |
| Meningitis | 16 CB=4 KT=12 | 00 | 04 GL=4 | 04 VU=4 | 06 AM=1 KM=5 | 13 KR=11 PU=2 | 06 PO=6 | 00 | 02 RP=1 KG=1 | 51 | 13 | 863 | 981 | -12.0% |
| Mumps | 04 | 12 | 01 | 01 | 15 | 01 | 06 | 00 | 08 | 48 | 96 | 1404 | 2150 | -34.7% |
| Leishmaniasis | 00 | 00 | 10 HB=10 | 00 | 00 | 00 | 03 AP=3 | 00 | 00 | 13 | Not available* | 535 | Not available* | - |

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: Matala, 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.

Table 4: Surveillance of Communicable diseases among IDP's

05th-11th Sept 2009 (37thWeek)

| Area | Disease | Dysentery | Enteric fever | Viral Hepatitis | Chicken Pox | Watery Diarrhoea |
|-------------|---------|-----------|---------------|-----------------|-------------|------------------|
| Vavunia | | 0 | 19 | 4 | 5 | - |
| Chendikulam | | 27 | 71 | 22 | 212 | 407 |
| Total | | 27 | 90 | 26 | 217 | 407 |

Table 4: Selected notifiable diseases reported by Medical Officers of Health

05th-11th September 2009 (37thWeek)

| DPDHS Division | Dengue Fever / DHF* | | Dysentery | | Encephalitis | | Enteric Fever | | Food Poisoning | | Leptospirosis | | Typhus Fever | | Viral Hepatitis | | Human Rabies | | Returns Received Timely** |
|------------------|---------------------|--------------|------------|-------------|--------------|------------|---------------|-------------|----------------|-------------|---------------|-------------|--------------|------------|-----------------|-------------|--------------|-----------|---------------------------|
| | A | B | A | B | A | B | A | B | A | B | A | B | A | B | A | B | A | B | |
| Colombo | 58 | 3381 | 7 | 161 | 1 | 11 | 9 | 166 | 0 | 45 | 155 | 657 | 0 | 5 | 6 | 98 | 0 | 4 | 92 |
| Gampaha | 64 | 3290 | 1 | 118 | 2 | 20 | 0 | 32 | 0 | 16 | 11 | 259 | 0 | 8 | 4 | 150 | 0 | 3 | 60 |
| Kalutara | 15 | 1317 | 1 | 284 | 0 | 11 | 1 | 48 | 1 | 44 | 40 | 247 | 0 | 1 | 1 | 65 | 0 | 2 | 83 |
| Kandy | 39 | 3536 | 1 | 219 | 0 | 6 | 0 | 23 | 1 | 56 | 5 | 167 | 4 | 138 | 3 | 98 | 0 | 0 | 84 |
| Matale | 32 | 1428 | 2 | 93 | 0 | 2 | 0 | 26 | 0 | 6 | 1 | 295 | 0 | 5 | 6 | 74 | 0 | 2 | 92 |
| Nuwara Eliya | 2 | 217 | 3 | 354 | 0 | 2 | 2 | 151 | 0 | 786 | 0 | 33 | 1 | 61 | 2 | 69 | 0 | 0 | 100 |
| Galle | 22 | 498 | 10 | 198 | 0 | 10 | 0 | 3 | 1 | 43 | 6 | 131 | 0 | 9 | 1 | 28 | 0 | 4 | 84 |
| Hambantota | 19 | 798 | 1 | 73 | 0 | 8 | 0 | 6 | 1 | 13 | 2 | 60 | 1 | 68 | 0 | 38 | 0 | 0 | 82 |
| Matara | 17 | 1016 | 2 | 221 | 0 | 4 | 0 | 5 | 0 | 16 | 2 | 125 | 7 | 115 | 1 | 49 | 0 | 1 | 76 |
| Jaffna | 0 | 14 | 0 | 89 | 0 | 3 | 0 | 209 | 0 | 28 | 0 | 0 | 0 | 124 | 0 | 160 | 0 | 2 | 0 |
| Kilinochchi | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mannar | 0 | 5 | 5 | 75 | 0 | 1 | 2 | 95 | 0 | 4 | 0 | 0 | 0 | 0 | 1 | 55 | 0 | 0 | 75 |
| Vavuniya | 11 | 39 | 29 | 1548 | 1 | 25 | 91 | 589 | 0 | 2 | 0 | 5 | 3 | 5 | 28 | 3724 | 0 | 0 | 75 |
| Mullaitivu | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Batticaloa | 3 | 509 | 22 | 232 | 0 | 12 | 3 | 15 | 0 | 50 | 0 | 9 | 0 | 2 | 0 | 17 | 0 | 4 | 82 |
| Ampara | 2 | 211 | 7 | 47 | 0 | 0 | 1 | 12 | 0 | 8 | 1 | 11 | 0 | 2 | 1 | 29 | 0 | 0 | 100 |
| Trincomalee | 0 | 321 | 2 | 95 | 0 | 3 | 1 | 9 | 0 | 1 | 0 | 17 | 0 | 19 | 3 | 45 | 0 | 1 | 60 |
| Kurunegala | 57 | 2484 | 21 | 175 | 1 | 10 | 4 | 57 | 3 | 15 | 8 | 95 | 1 | 67 | 6 | 124 | 0 | 4 | 90 |
| Puttalam | 6 | 536 | 2 | 123 | 0 | 7 | 1 | 64 | 0 | 2 | 3 | 75 | 0 | 31 | 3 | 34 | 0 | 1 | 78 |
| Anuradhapura | 3 | 504 | 1 | 92 | 0 | 4 | 1 | 7 | 18 | 38 | 0 | 81 | 0 | 28 | 1 | 165 | 0 | 3 | 79 |
| Polonnaruwa | 7 | 149 | 11 | 59 | 1 | 4 | 1 | 21 | 0 | 6 | 1 | 58 | 0 | 9 | 7 | 64 | 0 | 0 | 100 |
| Badulla | 5 | 265 | 9 | 226 | 0 | 2 | 1 | 35 | 0 | 27 | 1 | 79 | 6 | 102 | 4 | 269 | 0 | 1 | 60 |
| Monaragala | 2 | 141 | 8 | 91 | 0 | 1 | 0 | 23 | 0 | 13 | 0 | 13 | 1 | 59 | 2 | 79 | 0 | 1 | 73 |
| Ratnapura | 20 | 1861 | 6 | 408 | 0 | 19 | 0 | 46 | 0 | 12 | 5 | 222 | 0 | 0 | 4 | 145 | 0 | 1 | 72 |
| Kegalle | 44 | 3454 | 7 | 142 | 0 | 8 | 2 | 36 | 0 | 6 | 24 | 183 | 1 | 1 | 17 | 196 | 0 | 1 | 91 |
| Kalmunai | 7 | 173 | 1 | 80 | 0 | 1 | 0 | 13 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 17 | 0 | 0 | 54 |
| SRI LANKA | 435 | 26147 | 159 | 5205 | 06 | 174 | 120 | 1692 | 25 | 1240 | 265 | 2825 | 25 | 918 | 101 | 5792 | 00 | 35 | 75 |

Source: Weekly Returns of Communicable Diseases WRCD).

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

**Timely refers to returns received on or before 11th September, 2009 Total number of reporting units =311. Number of reporting units data provided for the current week: 236

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

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