



Official Newsletter of National Influenza Centre, Medical Research Institute, Sri Lanka

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Total samples received to NIC (ILI, SARI surveillance and clinical samples from hospitals) = 517 (385 in November) Fig 04

Total Positivity rate is 28% (30% in Nov, -Fig 03) *trend static*
of total samples received, 45% were Influenza A positive (*trend static*) Fig 05
55 % were Influenza B positive (*trend static*) Fig 05

Influenza A subtypes – H3 predominate 100% (n=26 subtyped)
H1 00%.

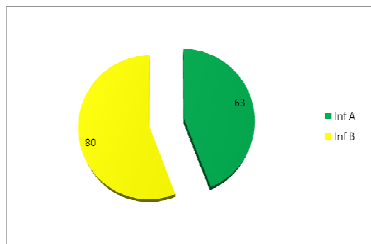


Fig 01



Fig 02

H1 = 00%
H3 = 100%

Surveillance samples = 105, ILI= 54 and SARI = 51. Please see Fig 06 for site performance.

Flashback Year 2017 was the most challenging and busiest year in our history of NIC. In 2017, Sri Lanka experienced the largest influenza outbreak in terms of samples, morbidity over the past decade. 7516 samples were received, well above the average annual (2800-3000). This number was more than the two waves of pandemic influenza A H1N1 in 2009 and 2010. *A big thank you for all different stakeholders of influenza who supported us through our times of difficulty.*

External Quality Assurance Panel (WHO/HK) : NIC scored 100% in WHO External Quality Assurance Panel on PCR for the 14th time. This is a testament of NIC's capacity of H5,H7 detection.

Cell culture/virus isolation Ten viruses were isolated from clinical samples in December. This fine art of isolating viruses were halted due to lack staff at NIC for many months. Cell culture was re-initiated inspite of another outbreak as it is an essential criteria of an NIC. We are thankful to Mr Wasantha Pushpakumara, MLT and Mr Asanka Nirmal MLT for their support. See page 05 for photographs under inverted microscope (visit our Facebook page for more fascinating photos).

Events : Unveiling vision, mission of NIC, Sri Lanka

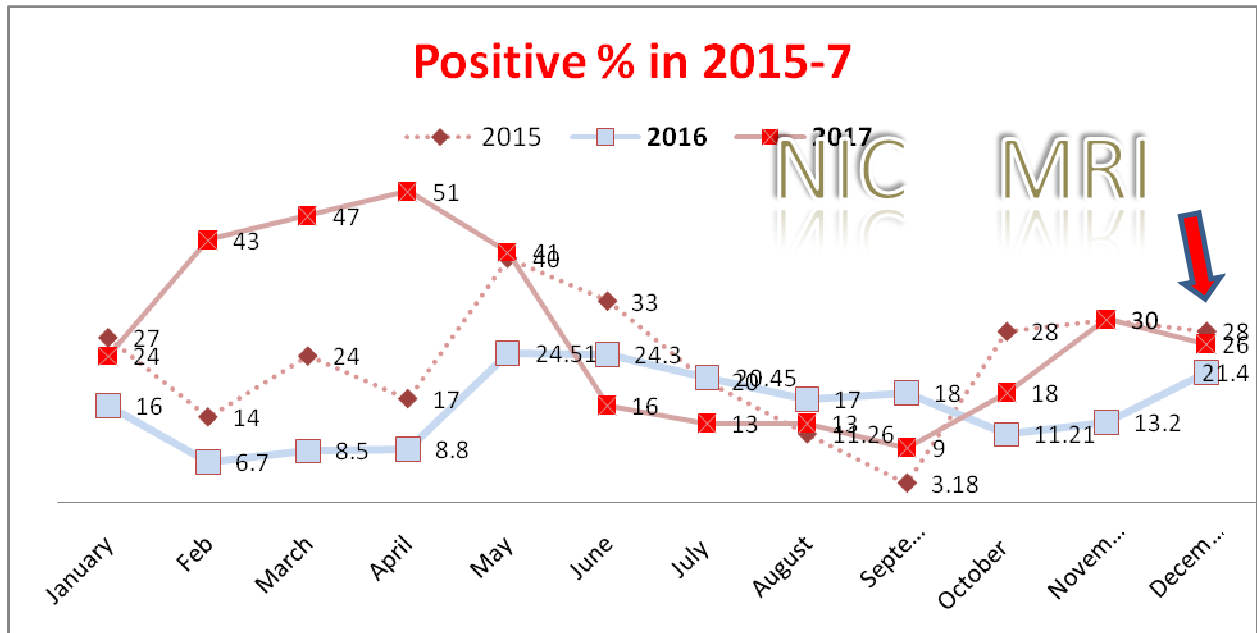


Fig 03

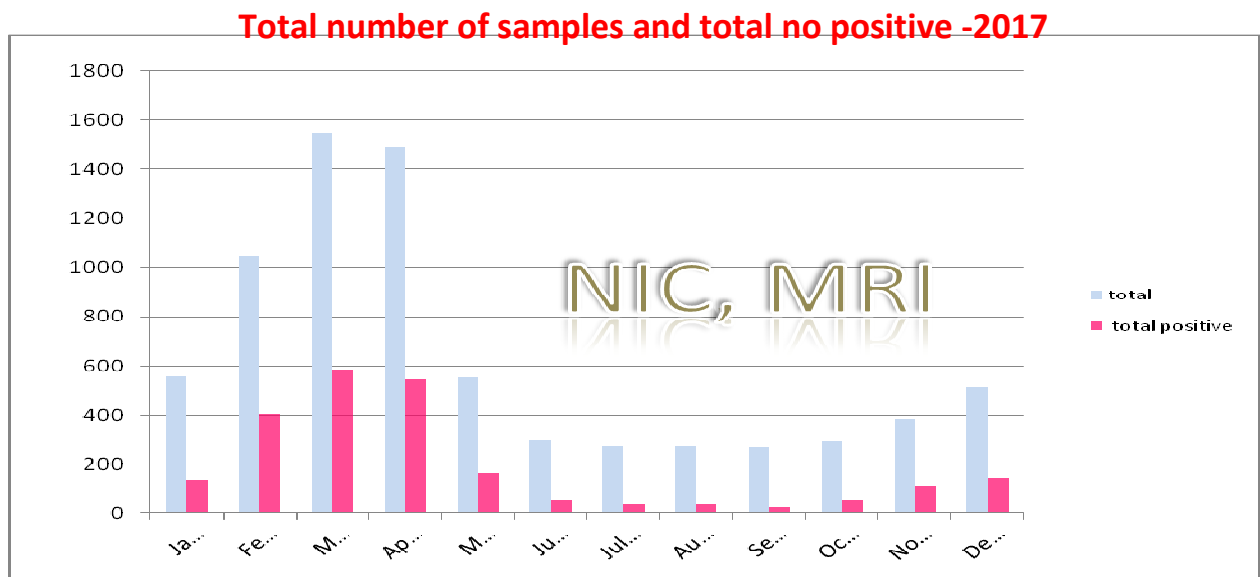


Fig 04

Percentage and Total number of samples of influenza A & B -2016-17

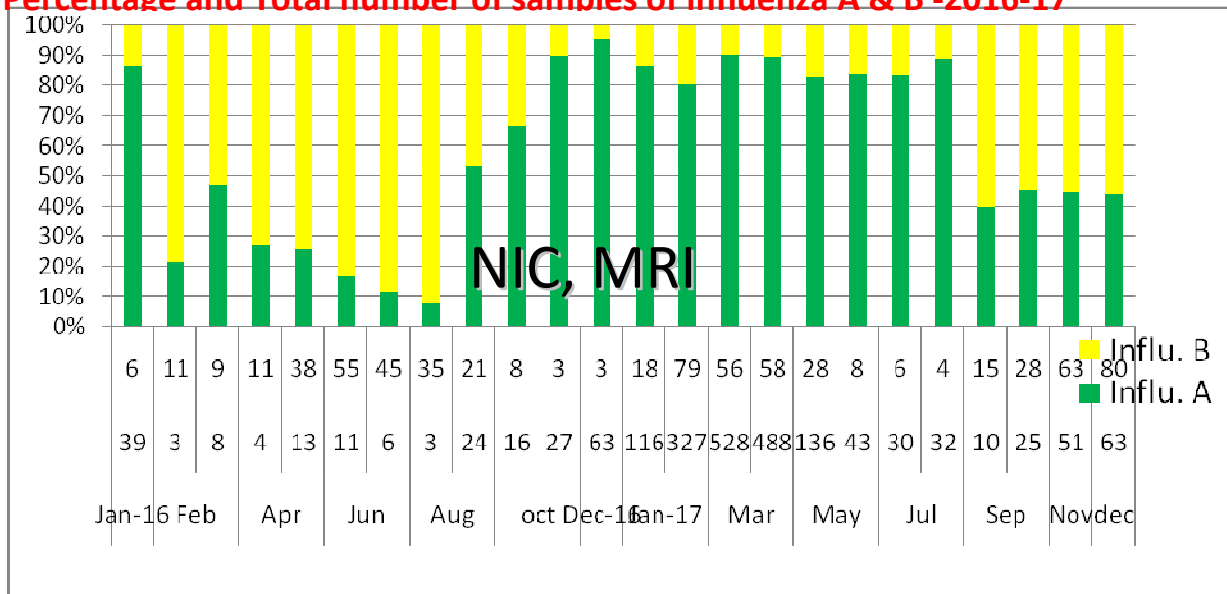


Fig 05

National Influenza Centre, Medical Research Institute

Surveillance samples done in Dec 2017



ILI Sites

Site	Total	Inf A	A(H1N1)	A(H3N2)	not typed	B
National Hospital, Colombo	10	0	0	0	0	1
CSTH Kalubowila	3	1	0	0	1	2
IDH, Angoda	8	0	0	0	0	3
GH Nuwara Eliya	0	0	0	0	0	0
TH Karapitiya	4	1	0	0	1	0
TH Jaffna	0	0	0	0	0	0
TH Batticaloa	0	0	0	0	0	0
TH Kurunegala	10	0	0	0	0	2
GH Chilaw	0	0	0	0	0	0
TH Anuradhapura	6	0	0	0	0	0
GH Polonnaruwa	0	0	0	0	0	0
PGH Badulla	8	0	0	0	0	2
PGH Rathnapura	5	0	0	0	0	0
Total	54	2	0	0	2	10

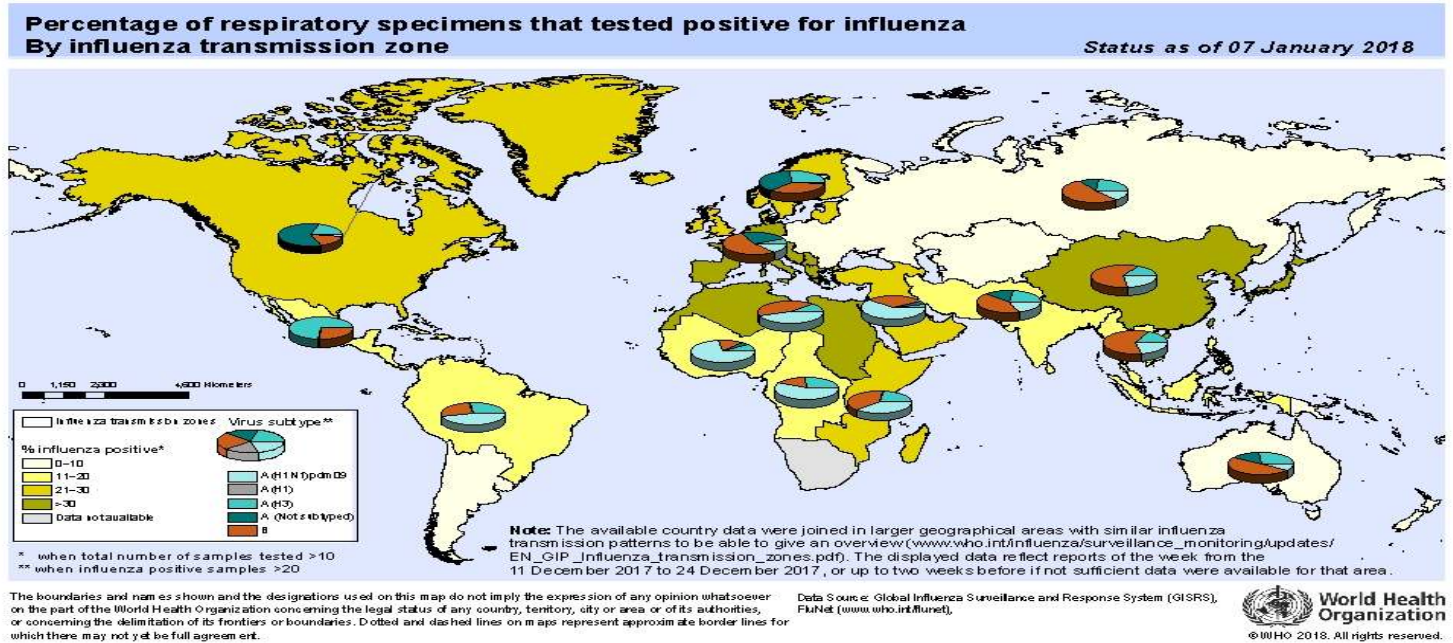
SARI Sites

CNTH Ragama	8	0	0	0	0	2
TH Peradeniya	9	1	0	1	0	2
GH Matara	5	0	0	0	0	1
Lady Ridgeway Childrens Hospital, Colombo	29	3	0	0	3	4
Total	51	4	0	1	3	9
Total ILI/SARI	105	6	0	1	5	19

Fig 06

Global influenza report is available at:

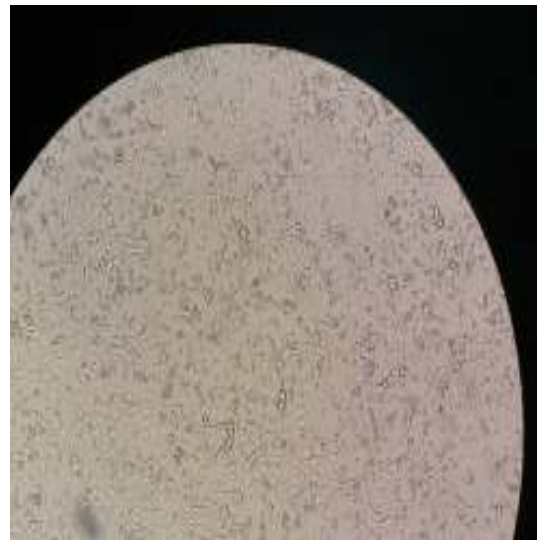
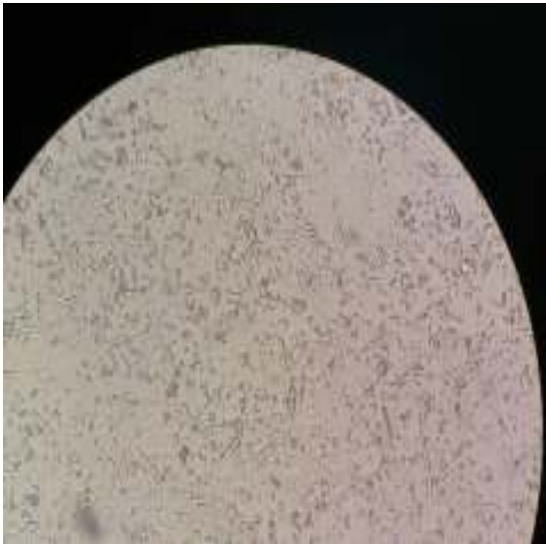
http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/



Summary : Influenza activity continued to increase in the temperate zone of the northern hemisphere while in the temperate zone of the southern hemisphere activity was at inter-seasonal levels. Worldwide, influenza A(H3N2) and B viruses accounted for the majority of influenza detections although influenza A(H1N1)pdm09 viruses were predominant in some countries.

- In North America, overall influenza activity continued to increase in the region, with detections of predominantly influenza A(H3N2) viruses.
- In Europe, influenza activity increased above baseline levels in most countries in Northern and Southwestern Europe with sharp increases in respiratory illness indicators in some countries. Activity remained low in countries in Eastern Europe. Influenza B virus detections remained frequent and the subtype of the influenza A viruses detected varied depending on the country and the surveillance system (outpatient or inpatient systems).
- In Western Asia, increasing influenza activity was reported in Israel and Jordan with predominantly influenza B and A(H1N1)pdm09 virus detections, respectively.
- In Central Asia, low to no influenza activity was reported.
- In East Asia, influenza activity continued to increase in recent weeks. In both Northern and Southern China, ILI and influenza activity continued to increase, with influenza B Yamagata-lineage viruses predominantly detected followed by influenza A(H3N2) viruses. Increasing detections of influenza B and A(H3N2) viruses were reported in the Republic of Korea.
- In South East Asia, low levels of influenza activity were reported.
- **In Southern Asia, increased influenza activity was reported in Iran with detection of all seasonal subtypes.**
- In Northern Africa, influenza activity was predominantly due to influenza A(H1N1)pdm09 virus detections. Activity increased in Egypt and Morocco; and Tunisia reported sharp increases in activity.
- In Western Africa, influenza activity continued at lower levels compared to previous weeks. Detections of predominantly influenza A(H1N1)pdm09 viruses were reported from Burkina Faso, Côte d'Ivoire, Ghana and Togo. In Middle Africa, Cameroon reported activity with influenza A and B viruses and the Democratic Republic of Congo reported detections of influenza A(H1N1)pdm09 viruses. In Eastern Africa, sporadic influenza detections were reported in Madagascar, Mozambique, and the United Republic of Tanzania.
- In the Caribbean and Central American countries, low to no influenza activity was reported.
- In the tropical countries of South America, low to no influenza activity was reported.
- In the temperate zone of the Southern Hemisphere, influenza activity decreased overall to inter-seasonal levels.

Pictorial



Appearance of cytopathic effects (CPE) of infected MDCK cell line by influenza virus under inverted microscope (Photo credit Asanka Sanjeewa-MLT-NIC)



Mr Asanka Sanjeewa (MLT,NIC) and Mr Wasantha Puspakumara (MLT/Immunology) examining the inoculated virus flasks under inverted microscope.



You may visit our official NIC Facebook for latest updates and news on influenza (local and global) and like us

