## Perspective

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### Citation Style For This Article:


<table>
<thead>
<tr>
<th>Program</th>
<th>Influenza Sentinel Surveillance ILI and SARI</th>
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<tbody>
<tr>
<td><strong>Start Year</strong></td>
<td>2008</td>
</tr>
<tr>
<td><strong>Provinces (Sites)</strong></td>
<td>Lusaka [UTH Pediatric, UTH Adult Hospital, Chipata Clinic] Copperbelt [Ndola Central Hospital, Arthur Davison Hospital, New Masala Clinic]</td>
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<tr>
<td><strong>Type of site</strong></td>
<td>Out Patient Clinics (ILI)</td>
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<tr>
<td><strong>Case definition</strong></td>
<td><strong>Influenza-Like Illness (ILI):</strong> Out-patient consultation AND temperature 38°C and above or history of fever AND cough or sore throat. <strong>Severe Acute Respiratory Illness (SARI):</strong> 5 yrs. and above: patient admitted with less than 7 days duration of illness AND temperature 38°C and above or history of fever AND cough or sore throat AND difficulty breathing. - 2m-5yrs: patient admitted with less than 7 days duration of illness AND cough or difficulty breathing AND one of symptoms Tachypnoea (2m-1yr RR &gt;50; 1-5yrs RR &gt;40) - Unable to drink or breastfeed - Lethargic or unconscious - Vomits everything (not only occa- sional) - Convulsions - Chest in-drawing (retractions under ribcage/stridor in a calm child)</td>
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<td><strong>Specimen collected</strong></td>
<td>Nasal-pharyngeal/ Oral-Pharyngeal Swab</td>
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<tr>
<td><strong>Main pathogen tested</strong></td>
<td>Influenza</td>
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### Epidemic Thresholds

Thresholds are calculated using Moving Epidemic Methods (MEM), a sequential analysis using R language available from: http://CRAN.R-project.org/web/package=mem designed to calculate the duration, start and end of the annual influenza epidemic. MEM uses the 40th, 90th and 97.5th percentile established from available years of historical data to calculate threshold activities. Threshold activity for influenza is categorized as follows: below epidemic threshold, low, moderate, high and very high. Transmissibility of influenza can be inferred from ILI data while SARI data gives an indication of severity.

### Comments

The 2019 season started in between weeks 4-18 (4th - 1st week of January/May), when the rates of Influenza-Like Illness (ILI) and Severe Acute Respiratory Infection (SARI) attributable to influenza virus infection was within the low seasonal threshold. The epidemic threshold rose from low to within moderate transmissibility in week 13-14 and maintained the low severity until week 18 (1st week of May). There appear to be experiencing the first cycle of activity which is currently in the below the threshold in week 21.
ILI Surveillance:
As at 31st May 2019, week 21. Specimens from 411 outpatients were received from two ILI surveillance sites. 378 were adequately sampled and tested. Influenza virus was detected in 32 of these samples; 24 were identified as Influenza B, 3 Influenza A H3N2, 3 Influenza A H1N1 and 2 as Influenza A Unsubtypable.

SARI Surveillance:
During this same period, specimens were received from 766 patients admitted to four SARI surveillance sites. 512 were adequately sampled and tested. Influenza was detected in 20 specimens; 16 of which were identified as Influenza B, 1 as Influenza A H3N2, 1 as Influenza A H1N1 and 2 as Influenza A Unsubtypable.

31st May 2019: Influenza Transmissibility
Fig 1: Out-Patient Clinic Visit Surveillance1 - (ILI Surveillance) for Influenza Detection and Epidemic Thresholds

In April - May 2019, ILI outpatient visits attributable to influenza virus infection from weeks 14-19 fell within low to below epidemic levels of transmissibility throughout the month.

1ILI Case / Total ILI Sampled *100
*Threshold based on 2013 - 2018

In April - May 2019, ILI outpatient visits attributable to influenza virus infection from weeks 14-19 fell within low to below epidemic levels of transmissibility throughout the month.
31st May 2019: Influenza Severity (Impact)

Fig 2: Hospital Admission Surveillance1 - (SARI Surveillance) for Influenza Detection and Epidemic Thresholds *

In April - May 2019, SARI admissions attributable to influenza virus infection from weeks 14 -21, fell from low to below the threshold for high severity.

1SARI Case / Total Admission Sampled *100
*Threshold based on 2013 - 2018

In April - May 2019, SARI admissions attributable to influenza virus infection from weeks 14 -21, fell from low to below the threshold for high severity.
Fig 3: Positives samples* by influenza types and detection rate by weeks in 2019.

*Specimens from patients with influenza-like illness at two (2) sentinel sites and three (3) sentinel sites for admitted patients from week 1 -20. The 2019 influenza season is currently characterized by spread of seasonal influenza and random detection of flu A, A H1N1 and subtypes A H3N2 in weeks, 1 - 13. A high number of seasonal influenza was detected between weeks 7-18 from all sentinel sites.

A high number of seasonal and pandemic A influenza detections was in the age group between 1 - 4 years.
The total samples collected as at 31st May 2019, are 1177; 1069(91%) have been tested. 73 (7%), are positive for influenza virus and 996 (93%) negative. Two (2) samples were rejected.