Piloting Respiratory Syncytial Virus (RSV) Surveillance system in selected sentinel sites in Egypt, 2017

Challenges and needs in implementing RSV surveillance

WHO Meeting of Mid-term Review of the RSV Surveillance Pilot Based on the Global Influenza Surveillance and Response System
18 – 20 December 2017
PAHO, Washington DC, USA
Enrollment criteria

• Screening done daily for all new cases of pneumonia from all age groups admitted to the inpatient wards and intensive care units of the selected sentinel hospitals. Patients be enrolled according to the following criteria:

• An acute pulmonary illness with cough with at least one of the following symptoms/signs;

• Cough + one or more of the following symptoms: Fever (>38.0°C or >100.4°F) - Tachypnea (>25 respirations/min) - Tachycardia (>100 bpm) - rales / crepitation + confirmed chest X-Ray

• Patients meeting case definition swabbed nasopharyngeal and oropharyngial swabs tested by PCR for RSV and influenza at CPHL
Epidemiologic characteristics of 5 sentinel pneumonia sites, Egypt 2016-2017

- Number of enrolled cases: 492
- Valid specimens for testing 459
- Age: One month-91 years (Median = 50 years)
- Males: 50%
- ICU admissions = 52%
- RSV positives among ICU admitted= 1%
- Influenza positives among ICU admitted= 1%
- Fatalities 10 cases = 2.2% Negative for RSV and influenza
Distribution of Influenza and RSV among 5 sentinel pneumonia sites Egypt July 2016- November 2017 (459 specimens)

- Flu A/H3N2
- Flu- B
- RSV

Percent RSV Positive

Percent Inf Positive
Distribution of Influenza and RSV by PCR and age groups in 5 sentinel pneumonia sites Egypt 2016-2017

- **Flu A/H3N2**
- **Flu B**
- **RSV Positive**
Challenges in implementing RSV surveillance

• Lost Fund from NAMRU-3 used for RSV sample shipment due to complete shut down since 2016

• High turnover of trained personnel Epi and Lab lead to inappropriate application of case definition and sample management

• Limited fund to support training and supervisory visits

• Shortage of storage area at CPHL, overcrowding of deep freezers due to receiving huge amount of samples nationwide
Needs for implementing RSV surveillance

• Fund to support RSV sample shipment
• Training of sentinel sites staff on Epi and Lab SOPs
• Subtyping and sequencing of RSV on central level
• On site training for RSV sequencing
Questions?