



JORDAN

8th Mena Influenza Stakeholders Meeting

Organized by Fondation Mérieux
Cairo 10-11 April 2018



Health sectors

- Ministry of Health
- Royal Medical Services
- Private
- University hospitals.
- United Nations Relief and Working Agency for Palestine refugees (UNRWA).
- NGOs.

Jordan Objectives For Influenza

- Strengthen the Surveillance and early warning system for influenza .
- Targeted seasonal influenza vaccination program
- Improve vaccine coverage for HW / high risk groups
- Raise awareness through training , health education and communication
- Strategic stockpiling of antiviral drugs and personal protection equipment (PPE's).

Opportunities of Surveillance system in Jordan

- Well organized health system
- Trained public health officers
- Presence of tools
- Political commitment
- Simple reporting
- WHO, CDC and other organizations support

Respiratory Diseases Surveillance Activities

Sentinel based Surveillance

- Influenza-like illness (ILI) in ambulatory patients
- Severe acute respiratory infection (SARI) and SARI mortality in hospitalized patients

Event based Surveillance

- Clusters/unusual or unexpected cases of SARI
- Unusual SARI mortality

Surveillance tools

- Surveillance Guideline
- Notifiable Diseases List
- Reporting Forms
- Investigation Forms

وزارة الصحة
مديرية رقابة الأمراض

قائمة الأمراض الواجب التبليغ عنها
List of Notifiable Communicable Diseases

مجموعة أ - الأمراض الواجب التبليغ عنها فوراً
Group A : Diseases to be notified immediately⁽¹⁾

▶ Acute Flaccid Paralysis (AFP)	▶ الشلل الرعاش الحاد
▶ Cholera	▶ الكوليرا
▶ Diphtheria	▶ الدفتيريا
▶ Food poisoning	▶ التسممات الغذائية
▶ HIV/AIDS ⁽²⁾	▶ العوز المناعي البشري
▶ Meningococcal diseases ⁽³⁾	▶ أمراض المكورات السحائية
▶ Neonatal tetanus	▶ التترانوس الوليدي
▶ Pertussis	▶ السعال الديكي
▶ Plague	▶ الطاعون
▶ Poliomyelitis	▶ شلل الأطفال
▶ Rabies	▶ داء الكلب
▶ Suspected G. Measles ⁽⁴⁾ & Congenital Rubella Syndrome	▶ التهاب حمية الحصبة و متلازمة الحصبة الماتية الخلقية
▶ Suspected Measles ⁽⁴⁾	▶ التهاب حمية
▶ Unexpected or unusual diseases or events ⁽⁵⁾	▶ الأمراض أو الأحداث غير العادية أو غير المتوقعة
▶ Viral hemorrhagic fevers ⁽⁶⁾	▶ الحميات النزفية الفيروسية
▶ Yellow fever	▶ الحمى الصفراء

مجموعة ب - الأمراض الواجب التبليغ عنها اسبوعياً وشهرياً
Group B : Diseases to be notified weekly & monthly

▶ Adverse Events Following Immunization	▶ الآثار الجانبية للتطعيم
▶ Animal bite	▶ لعق الحيوان
▶ Bacterial (non-meningococcal) meningitis	▶ التهاب السحايا (عدا المكورات السحائية) البكتيري
▶ Bilharziasis	▶ البهازياسيس
▶ Bloody diarrhea	▶ الإسهال الدموي
▶ Brucellosis	▶ الحمى المالطية
▶ Chicken pox	▶ الجدري المائي
▶ Cutaneous leishmaniasis	▶ الشعاب الجلدية
▶ Diarrheas	▶ الإسهالات
▶ Hydatid cysts	▶ الأكياس المائية
▶ Malaria	▶ الملاريا
▶ Mumps	▶ المنكعاب
▶ Sexually transmitted diseases (STDs) ⁽⁷⁾	▶ الأمراض المنقولة عن طريق الجنس
▶ Tetanus	▶ التترانوس
▶ Tuberculosis ⁽⁸⁾	▶ السل
▶ Typhoid & paratyphoid	▶ التيفوئيد والباراتيفوئيد
▶ Viral hepatitis ⁽⁹⁾	▶ التهاب الكبد الفيروسي
▶ Viral meningitis	▶ التهاب السحايا الفيروسي

يتم الإبلاغ لمديرية الصحة المعنية في المنطقة
مديرية رقابة الأمراض - هاتف : ٥٦٠٧١٤٤ - فاكس : ٥٦٨٦٩٦٥ - www.dod.gov.jo

Influenza Surveillance

Two influenza surveillance programs :

- SARI (severe acute respiratory illness)
- ILI (influenza like illness)

SARI Surveillance sentinel sites :

1. Prince Hamza Hospital (MOH)
2. King Abdullah University Hospital in Irbid (University)
3. Al Karak Hospital (MOH)
4. Zarka Hospital; (Dec., 2014)





Objectives of SARI

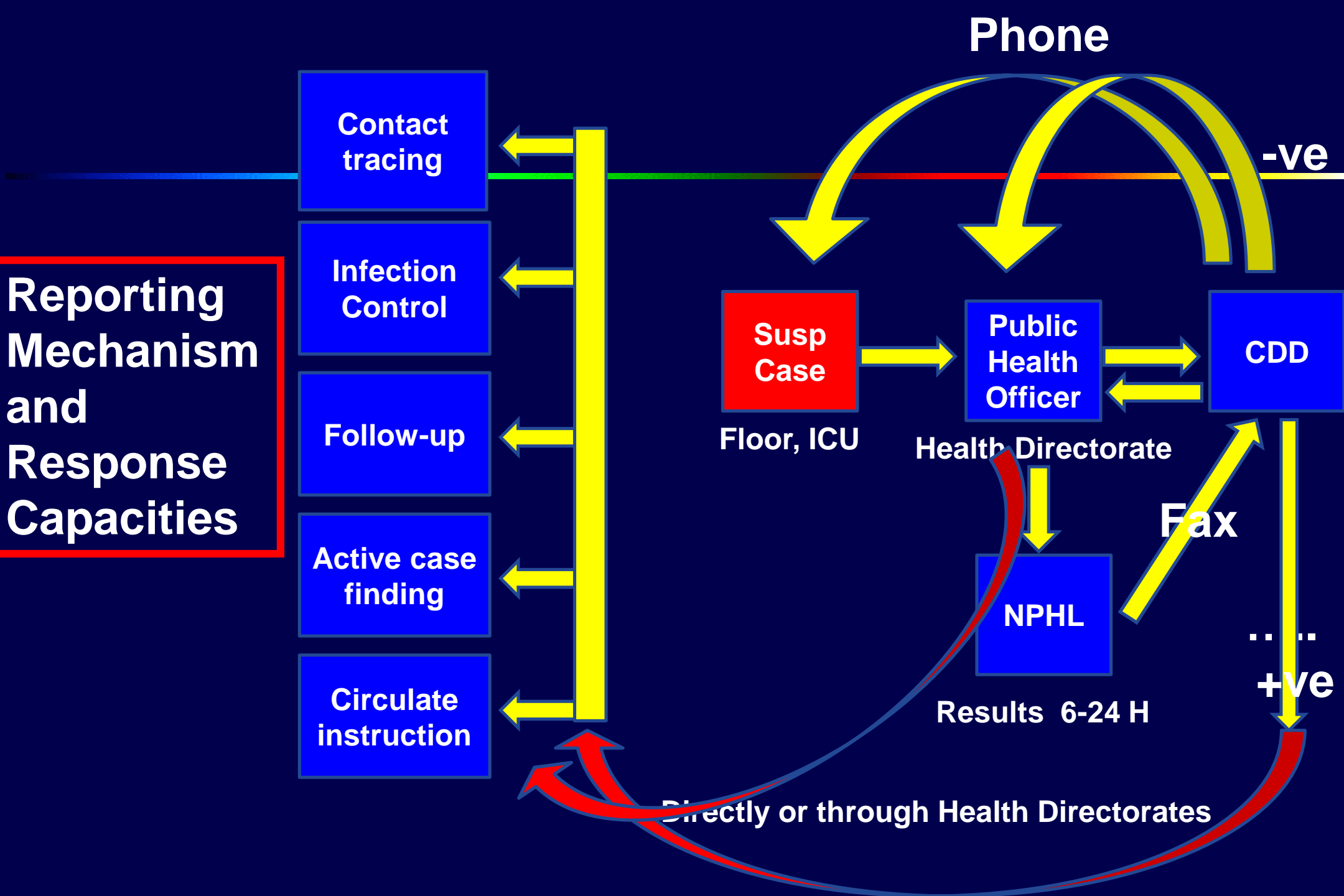
- **To describe the epidemiology of SARI**
- **To identify the etiologic agents for SARI**
 - **Influenza & Other viral agents**
- **To build epidemiological and lab surveillance capacity for respiratory pathogens**
- **To support pandemic preparedness activities**



Methodology

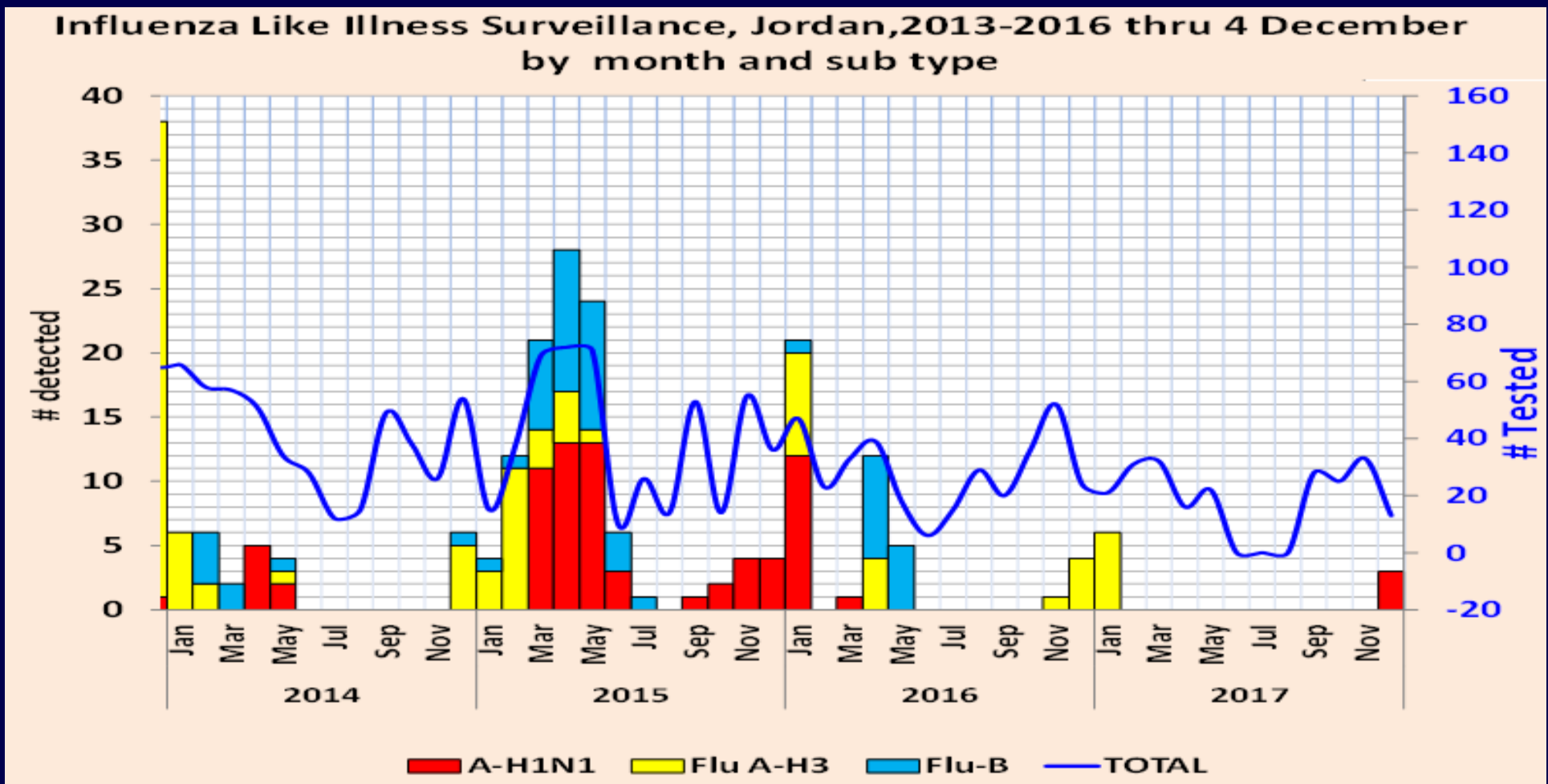
- **Standardized protocol and case definitions,
Last update (WHO case definition)**
- **Identifying SARI cases by Well trained Surveillance
Coordinators**
- **Training and capacity building and feedback (epi and lab)**
- **Enrollment all SARI patients**

- **Standardized data collection form**
 - **Demographics, clinical data,**
 - **history of antibiotics administration**
 - **hospitalization,**
 - **chronic diseases,**
 - **investigation data (lab and radiology)**
 - **outcome**
 - **Follow up until discharge or death**

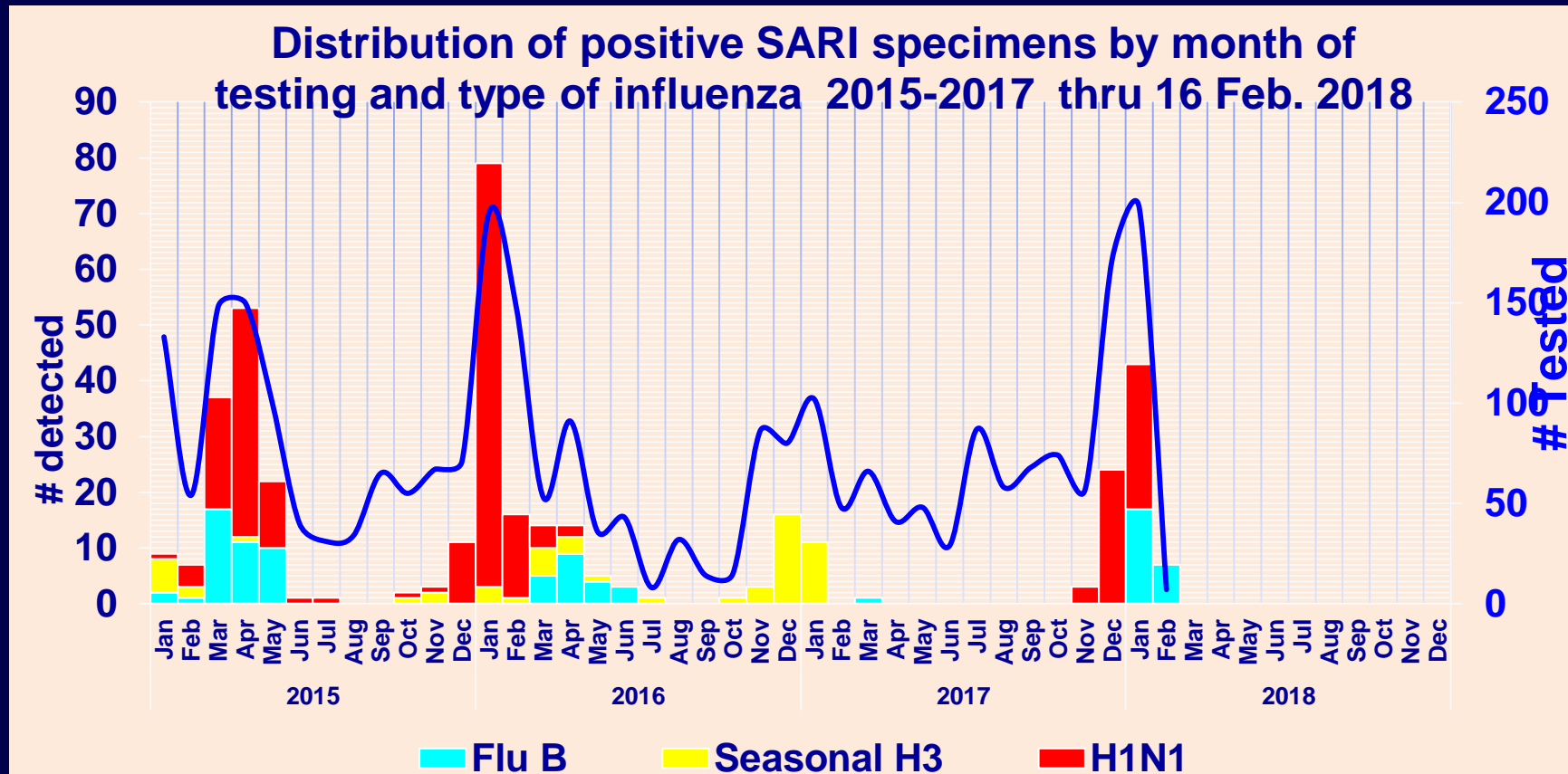


2nd National capacities to monitor trends in circulating viruses

- ILI National surveillance



SARI National surveillance



SARI Patient's Characteristics

	2013	2014	2015	2016	2017
No. of enrolled	430	693	958	721	612
Samples tested	425	673	899	642	553
Median Age (yrs)	1.1 yr	1.4 yr	6.8	4.8	1.5yr
Proportion of males	61.3	56.9	56.6%	57.5	60.8%
Chronic conditions	18.9	32.8	38.1	33.9	27.3
ICU admission	5.6	12.8	12.6	11.9	7.7
Ventilation	2.2	7.8	5.9	5.1	2.6
Mortality	0%	0.3%	0%	0.9	2.3

Etiology

FINAL RESULTS	2015	2016	2017
Flu_A_H1N1	12.94	10.12	0.5
Flu_A_H3	1.13	4.72	1.6
Flu_B	4.31	2.77	0.20
Mix. Flu_B_Flu_A_H1N1	0.31	0	0
Mix. Flu_B_Flu_A_H3	0	0.14	0
negative	74.02	70.74	97.7
Total tested Specimens	899	642	553 (59 pending)

Impact

- ✓ **Epidemiology of Influenza cases**
- ✓ **Detection of the new strain**
- ✓ **Enhancing management protocol**
- ✓ **Identification the aetiology, determination the dominant strain**
- ✓ **Estimation of magnitude**
- ✓ **Identification patterns and trend of Influenza**

THANKS

