



PAKISTAN

(COUNTRY ACTION PLAN FOR INFLUENZA)

7th Mena Influenza Stakeholders Meeting

Organized by Fondation Mérieux

Riga, Latvia
9-10 September 2017

2016-17 SURVEILLANCE DATA SUMMARY

- Start and end dates of influenza epidemics: start: 1st Oct 2017 - end: 31st Mar 2017:
- Seasonal influenza viruses from October to March with a peak in December
- **Influenza A/H3N2**
 - A/Hong Kong/4801/2014-Like
 - HA Genetic Group:3C.2a1
- **Influenza A/H1N1Pdm 09**
 - A/Michigan/45/2015 Sep
 - HA Genetic Group: 6B.1
- **Influenza B**
 - Both B/Yamagata(Y3) and B/Victoria(V1A) in circulation

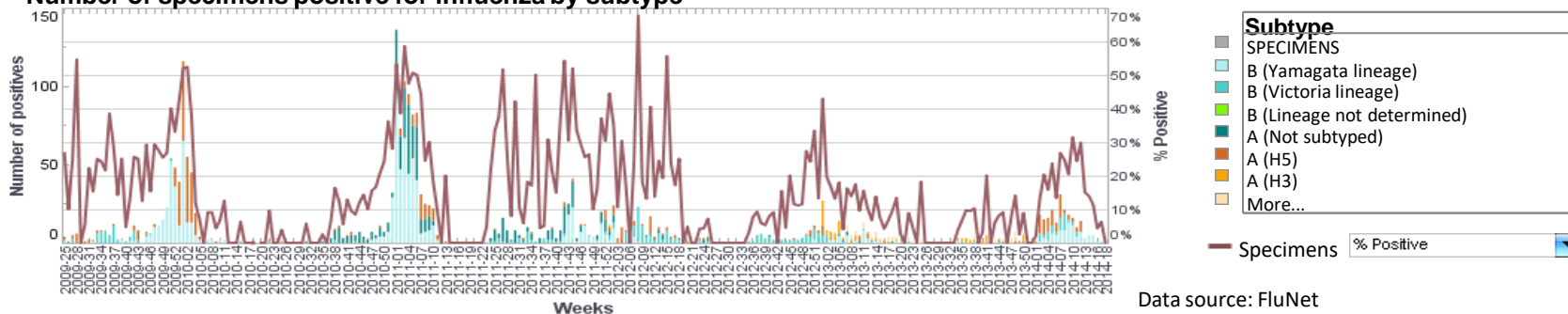
All analyzed recent viruses are susceptible to Neuraminidase Inhibitors!!
- Severity of the epidemics:
- Morbidity (No of reported cases): Undetermined
- Mortality (No of reported deaths): ???

INFLUENZA SURVEILLANCE REPORT 2009-14

Graphs for: **Pakistan** Period: 2009-25 to: 2014-18 generated on: 24-Jun-2014

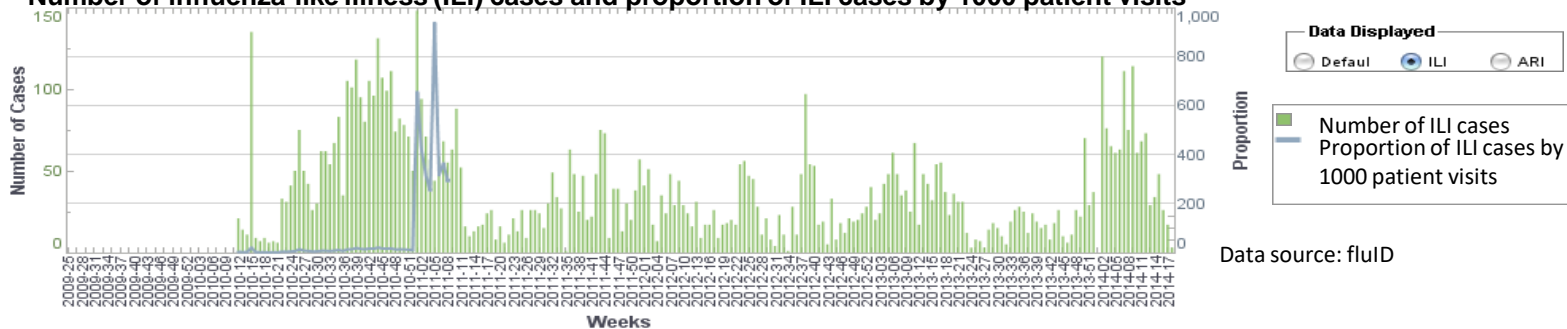
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Number of specimens positive for influenza by subtype



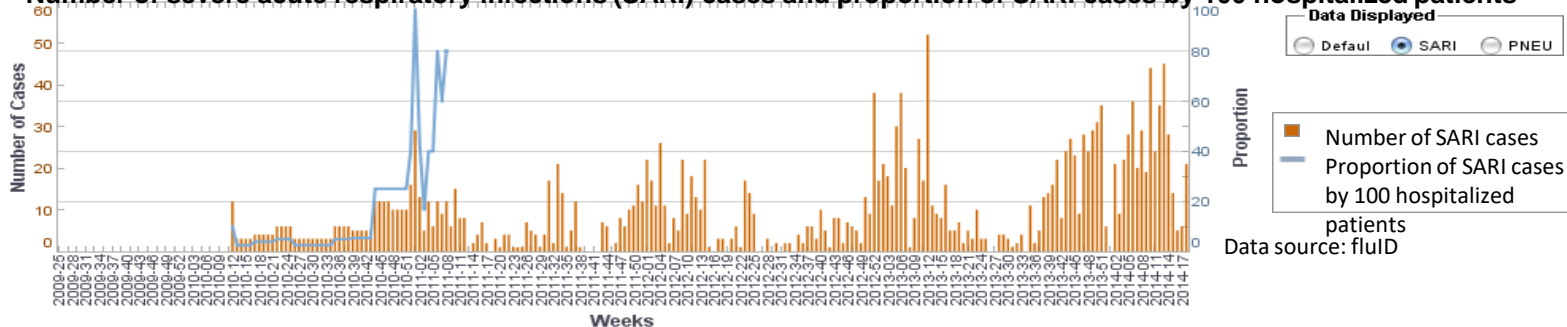
Data source: FluNet
(www.who.int/fluNet),

Number of influenza-like illness (ILI) cases and proportion of ILI cases by 1000 patient visits



Data source: fluID

Number of severe acute respiratory infections (SARI) cases and proportion of SARI cases by 100 hospitalized patients



Data source: fluID



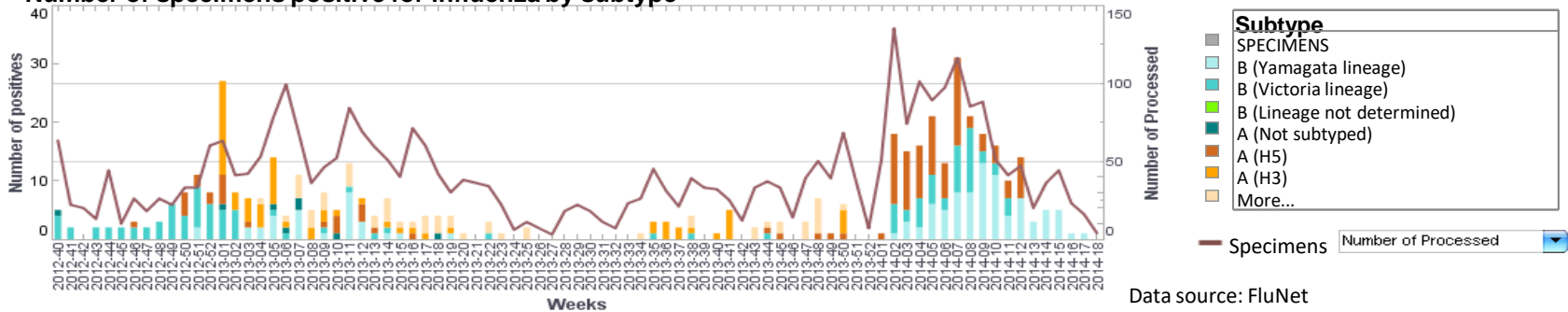
Source: WHO/Global Influenza Programme fluID and FluNet.

Data displayed might be delayed from data entering. Some regional data is imported once a week from regional offices.

Real time data from the EURO region are available at www.euroflu.org

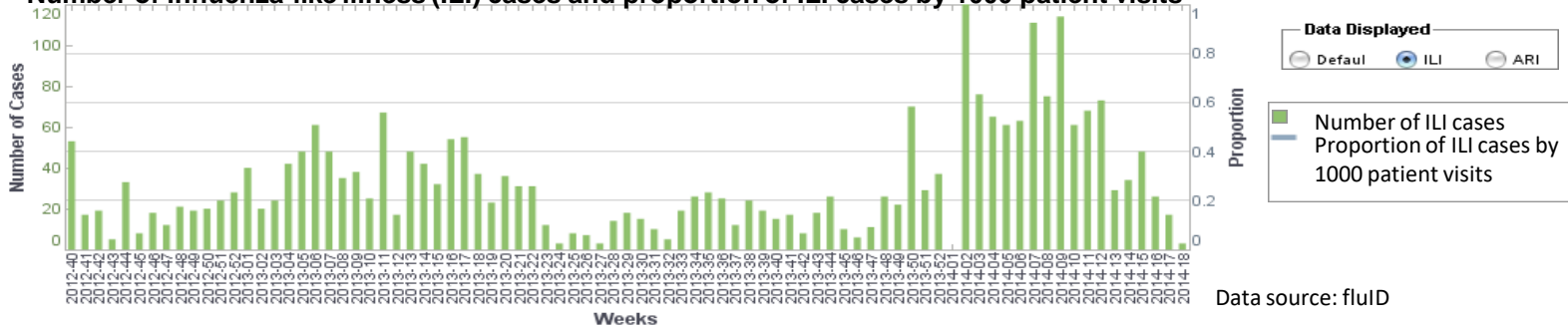
INFLUENZA SURVEILLANCE REPORT 2014-2016

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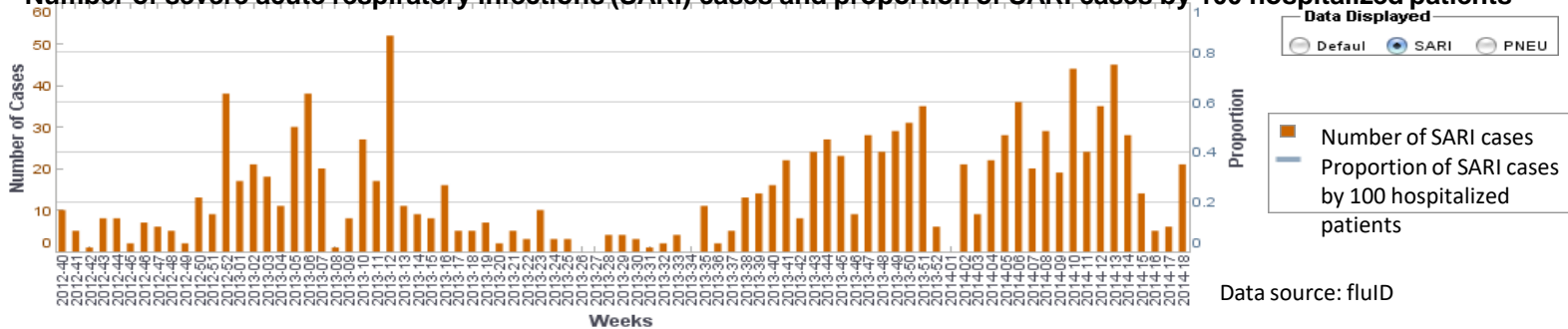
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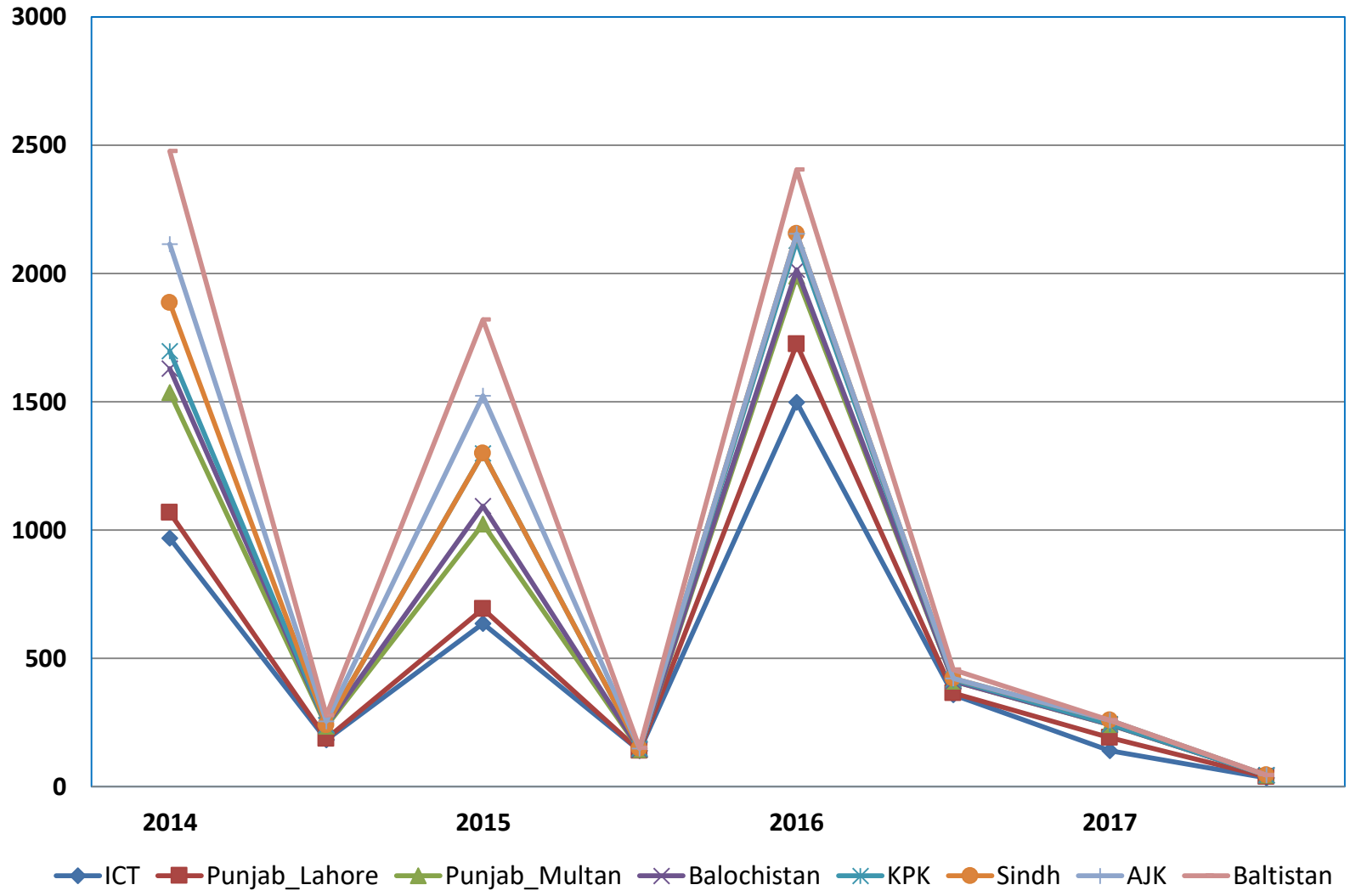


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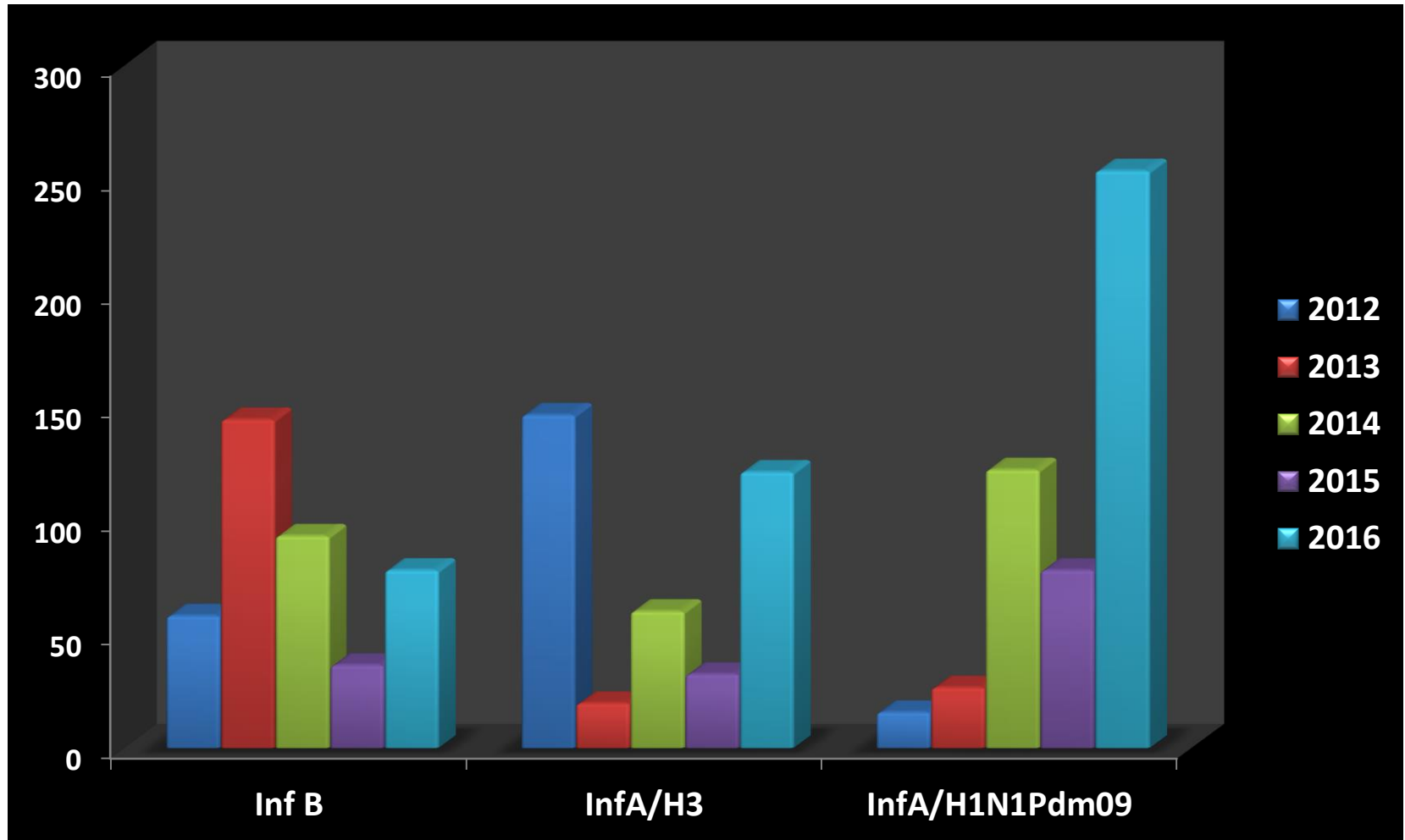
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SEASONAL INFLUENZA VIRUS CIRCULATION BY PROVINCE/REGION



SEASONAL INFLUENZA DETECTIONS BY SUBTYPE(2012-16)



COUNTRY OBJECTIVES FOR THE UPCOMING 3 YEARS

- Continue Sentinel lab based Surveillance for seasonal Influenza viruses
- Maintain molecular capacity for detection & diagnosis of seasonal and potential novel strains
- To increase awareness among physicians and HCPs about the influenza
- Strengthening Laboratory and Epidemiology Collaboration
Support capacity building on key aspects;
 - Uniform case definitions for ILI & SARI
 - Sample collection and Transport
 - Detection and reporting
 - Rapid Response protocols
 - Collaboration with Veterinary and allied sectors in case of novel/avian/swine Influenza outbreaks

COUNTRY OBJECTIVES FOR THE UPCOMING 3 YEARS

- Prospective targeted surveillance at POEs (Airports, land crossings)
- Take forward 'Burden' of Influenza studies
- Include other respiratory pathogens (RSV, HmPV, AdenoV) in ILI/SARI surveillance
- Focus on identification of high risk groups (pregnancy, co-morbidities; COPD, IHD DM) and country specific guidelines for preventive interventions

COUNTRY ACTION PLAN YEAR 2018 (1)

COMPONENTS	Q1	Q2	Challenges
SURVEILLANCE	How useful is current surveillance data?	How can it be used for- Identifying HRGs by age, health status, geographic special needs	ILI/SARI reporting Laboratory facility is limited to a few labs
VACCINATION	Provide/increase official recommendations for influenza vaccination	Starting campaigns like RTDs or SPPs during flu season, i.e September till march through the materials provided by our regional team	Raise the vaccination coverage among identified high risk groups particularly in adult populations e.g diabetic, COPD and IHD
SOCIAL MOBILIZATION / EDUCATION / AWARENESS	Use available data to support maternal education for childhood influenza	Identify the key social factors that must be targeted for effective messages	Incorporate effective communication in to response capacity in case of surge or outbreaks
ADVOCACY & POLICY	Inclusion of Influenza Associated SARI in National Priority disease list	Support post vaccination impact evaluation for other key pathogens such as Strep. Pneumoniae	Logistic and financial

COUNTRY ACTION PLAN YEAR 2018 (2)

COMPONENTS	Q3	Q4	Challenges
SURVEILLANCE	To collect the data on flu burden using the WHO prescribed tool		No structured IDSR system is there
VACCINATION	Provide /increase funding for vaccination by governments	To educate the GPs across Pakistan so they will communicate our message of the importance of vaccination to our local population	> 60% of population live in rural areas where difficult to arrange scientific sessions
SOCIAL MOBILIZATION / EDUCATION / AWARENESS	Risk Communication messages for HCP and community	Appropriate media messages	
ADVOCACY & POLICY	Advocacy for vaccination policy to health authorities	Use available data to make a case for vaccination priority groups	There are other competing priorities

CONCLUSIONS / HIGHLIGHTS

- Sentinel based influenza surveillance network in place supported by NIC at NIH Islamabad
- Distinct seasonality with peak activity levels are observed in most regions
- Available data indicates there is a sizeable burden of influenza. However, influenza related morbidity and mortality estimates required
- Country specific vaccination priorities must be determined for policy recommendations

THANK YOU