Foundation for Influenza Epidemiology: Development and perspectives

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Global annual Meeting, October 18th, 2016
Some people have an increased risk of Influenza

RISK GROUPS FOR INFLUENZA DEFINED BY WHO

At greater risk of influenza-related complications
- Pregnant women
- Children aged 6 months to 5 years
- Elderly
- People with underlying health conditions:
  - People suffering from cardio-vascular diseases
  - Diabetics
  - Immunocompromised patients
  - People with chronic lung diseases

At greater risk of influenza exposure
- Healthcare workers

Objectives for Influenza surveillance

Increasing awareness to expand influenza surveillance and to include more epidemiological information (post 2009 pandemic $^{2,3}$)

Specific gaps in global influenza surveillance capacity

1. Global Epidemiological Surveillance Standards for Influenza, Guideline, WHO 2013
GIHSN genesis

- In the past, Sanofi Pasteur supported various small scale influenza networks worldwide.

- Beginning in 2011, SP increased its investment in selected influenza networks to generate more robust and uniform data: set-up of the GIHSN

- In 2015, Sanofi Pasteur Executive Committee has approved the creation of the foundation for influenza epidemiology under the aegis of the Fondation de France.

- In 2016: The GIHSN needs to be consolidated and extended to additional countries hospital sites. In order to reach that goal, GIHSN need additional funding partners in the next years.
Mission of the Foundation for Influenza Epidemiology

- The dedicated fund support targeted epidemiological research in the field of influenza (and other respiratory viruses) through the scale up of the GIHSN.

- Funding is allocated among applicants to a call for tender and must be non-for-profit institution.

- Selection of proposals is made by a consensus of the Executive Committee members.
Data generation and Scientific Publications

- Severe Influenza Burden
- Pattern of Strain Circulation by subtype by region
- Influenza activity and lengths of epidemics
- Genetic Characterization
- Benefit of Flu vaccination

Surveillance Partnerships

- With public institutions at national levels
- With international Influenza experts

Platform

- To generate data on other respiratory viruses
- To support characterization of strain for the vaccine recommendation
- To develop health economics and resources used outcomes

GIHSN Surveillance Country sites
Standard protocol

Coordinating Center
FISABIO

- Protocol implementation
- Yearly pooled analysis

Seasonal Grant allocations

Foundation for Influenza Epidemiology
Governance Body: Executive committee
(3 External Experts, 4 Sanofi Pasteur members and 2 donors)

Funding Donors

Sanofi Pasteur
To be defined
To be defined
Collaboration framework

- All studies are funded through a seasonal grant from the Foundation for Influenza Epidemiology.
- Data is owned by sites – Sanofi Pasteur has no access to the raw data.
- Coordination activities and technical support is provided by a coordinating partner FISABIO.
- GIHSN Sites are invited to share their data with FISABIO to produce the pooled analysis presented during the annual meeting.
- This platform is an opportunity to plug additional research components:
  - RSV and other respiratory viruses burden
  - Genetic characterization of strains during the season to inform WHO recommendation (see recent publication)
  - Health economics data on resources used
2\textsuperscript{nd} Call for proposal
2016-17 influenza season
The 2016-2017 call for proposal

• Publicly available in May 2016 on the [www.gihsn.org](http://www.gihsn.org) website
• 24 dossiers were received and evaluated by the executive committee members in September.

• The selection of proposals has been based on the following criteria
  ▫ Geographical representativeness of the site for the GIHSN mission
  ▫ Scientific relevance of the proposal and the proposed design
  ▫ Role of the institution in the national/regional influenza surveillance system
  ▫ Experience in conducting epidemiological studies, in particular similar active surveillance study
  ▫ On-site laboratory capacities to test influenza stains by RT-PCR
  ▫ Level of co-funding from the applicant
An international partnership with public health institutions

2016-2017 season: 14 GIHSN sites - 8 new

- Russia: Moscow: Ivanovsky Institute of Virology, Dr. Bursteva
- St. Petersburg: Research Institute of Influenza, Prof. Sominina
- China: Fudan University - Dr. Tao Zhang
- India: Sher-i-Kashmir Institute, Dr. Koul
- Kazakhstan: National Influenza Center, Dr. Kuatbayeva
- Turkey: Turkish Society of Internal Medicine, Dr. Unal
- Tunisia: Institut Pasteur de Tunis, Dr. Ben Salah
- Ivory Coast: Institut National d’Hygiène Publique - Dr. Coulibaly
- South Africa: Respiratory and Meningeal Pathogens Research Unit - Dr. Marta Nunes
- Spain: FISABIO - Dr. Puig-Barbera
- Czech Republic: National Institute of Public Health - Dr. Kyncl
- Romania: National Institute of Infectious Diseases - Dr. Draganescu
- Canada: SOS network - Shelly McNeil
- Mexico: Dr. Ruiz Palacios, Institution nacionales de Salud
- Peru: CITBM - Dr. Alberto Laguna
Global Influenza Hospital Surveillance Network

• Unique initiative, acknowledged by international experts, and public health institutions in countries.

• Currently about 40 hospitals in 13 countries.

• More than 2,300 yearly documented cases of hospitalisations from influenza during the past season.

• Available data on other respiratory viruses and in-season capacities to generate strain genetic characterization at several sites.

• Platform to plug in data for health-care use (economic burden).

• Already 4 years of data, comparative assessment of seasons.

• Importance to sustain actual partnerships and include new funding partners for the next years.
Thank you