

WHO influenza Surveillance SARI/ILI

Global Influenza Programme

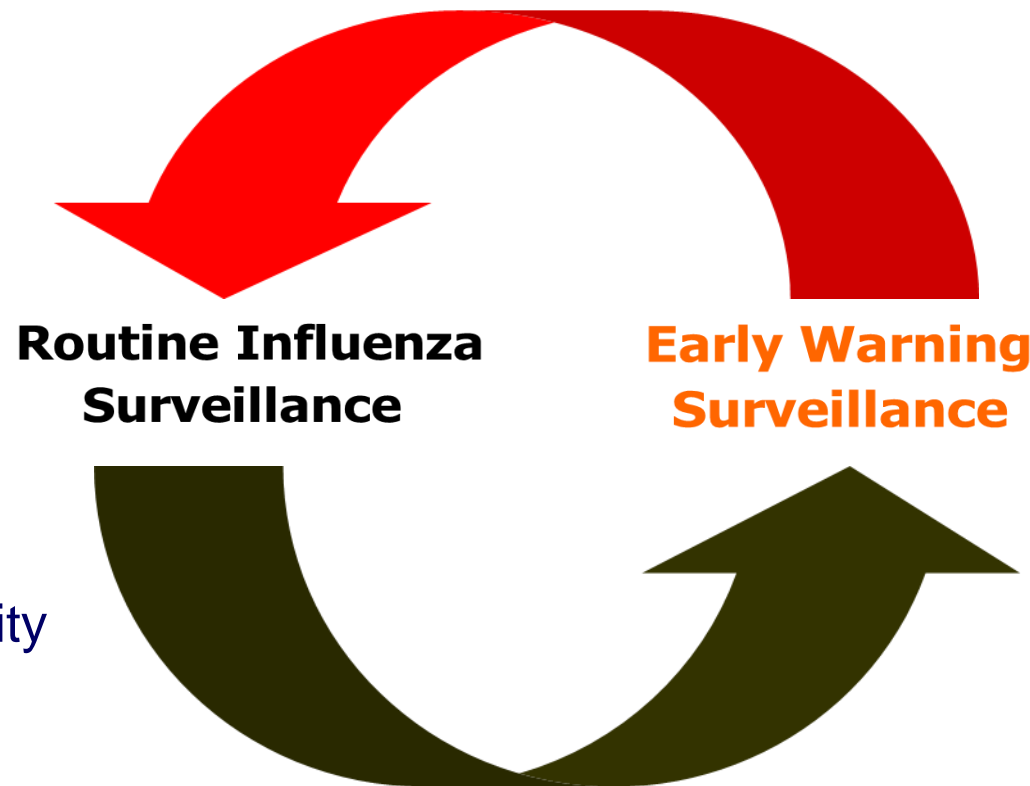
WHO

The need of global influenza surveillance

- Understand
 - burden of disease in different countries
 - age and risk groups affected
 - the seasonality / pattern (tropical zones)
- Identify
 - changes in the disease (severity, transmission)
 - changes in the virus (shift, drift)
 - outbreaks of international concern
- Advise
 - vaccine composition
- Provide
 - the global context
 - guideline and recommendations
 - support in risk assessment,
& response

Two systems are needed

- Event based surveillance: early warning (for the unexpected)
- Indicator based surveillance: routine influenza surveillance
 - Sentinel ILI and SARI surveillance to gather quality data



Approach Sentinel surveillance

- Premise: Quality data can be obtained from a few well run sentinel sites
 - Small amounts of high quality data are better than large amounts of low quality data!
 - More efficient and less resource demanding
- Sentinel syndromic surveillance for mild and severe illness:
 - Influenza-like-Illness (ILI)
 - Severe Acute Respiratory Illness (SARI)
- Supported by laboratory diagnostics for all or a systematic proportion

Case Definitions

- ILI :
 - An acute respiratory illness with measured temperature of $\geq 38^{\circ}\text{C}$ and cough with onset within the last ten days.
- SARI :
 - An acute respiratory illness *with history of fever* or measured fever of $\geq 38^{\circ}\text{C}$ and cough, with onset within the last ten days, requiring hospitalization.

Use of standard case definition will enable comparison, over time and between areas (regions, countries)

Selection of Sentinel Site Considerations

- Representative of population under surveillance
 - Large referral facility: high number of cases; difficult to identify catchment area; tendency to more severe cases
 - District hospital: fewer total cases; may be possible to define better the catchment area;
 - Demographic / socio economic makeup of area
- Representative of climate and differences in location
- Not possible to define an exact number of sites / cases needed
- Feasibility and sustainability

Analysis and Reporting

- Regular analysis of own data and comparison to historic data as well as other countries
- Regular feedback / reporting to policy makers, information provider and partners is crucial.
- Data sharing with regional and international organizations. WHO FluID, FluNet

Average (Baselines) and Thresholds

- The use of Average (baseline) or threshold is useful to:
 - Identify the start / end of the season
 - Communicate the level of flu activity to clinicians, media, and the public
 - Compare the current season to others
- Regular “visual” analysis of data important

Monitoring and Evaluation

- System needs to be continuously monitored
 - Timeliness
 - Completeness
 - Reporting
 - Consistency of data
- Periodic in-depth evaluations with site visits.
 - Should be done before expansion
 - Review of admissions records
 - Evaluate use of case definitions
 - Review timeliness of each step

Take home message

- **ILI and SARI sentinel surveillance**
 - Mainly for monitoring purpose, what is circulating, where and when activity high or low
 - Allows comparison to assess severity of the season
 - Will help identify the burden of influenza
 - Allows vaccine strain selection
 - Generated data are useful – when analysed and shared
 - Provides the system to be able to react to emerging threats
 - Complements event based surveillance

Danke!!

Merci!

Thank you !!!

Gracias!!!

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