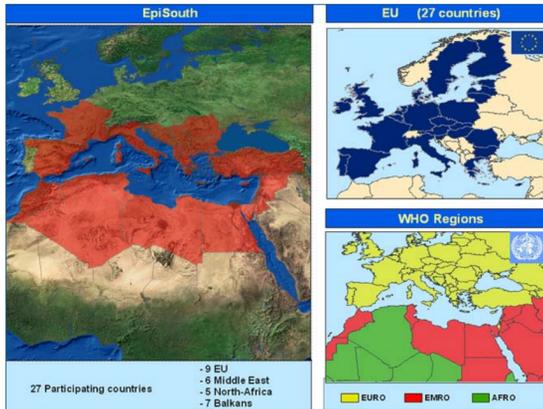


# Early warning and Epidemic Intelligence in the Mediterranean region and Balkan countries: an EpiSouth network challenge

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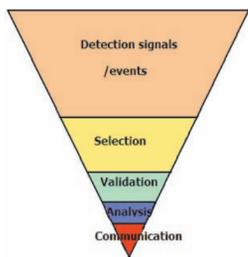
## EPI SOUTH: NETWORK FOR THE CONTROL OF COMMUNICABLE DISEASES IN MEDITERRANEAN COUNTRIES



- EpiSouth network started in October 2006
- The network is composed of 27 countries and 7 Working programmes (WP)
- Objective of the EpiSouth PLUS project:
  - Increase the health security in the Mediterranean area and South-East Europe by enhancing and strengthening the preparedness to common health threats and bio-security risks at national and regional levels in the countries of the EpiSouth network.
- **Epidemic intelligence (EI) and cross-border alerts**, one of WP is managed by Institut de Veille Sanitaire (InVS), the French institute for public health surveillance.
- **Objective of this WP**
  - Enhance Mediterranean Early Warning functions allowing alerts and Epidemic intelligence information sharing among EpiSouth countries
  - Share verified information detected through epidemic intelligence
  - Development of a Mediterranean Early Alert System through secure exchange platform for national cross-border alerts

## RATIONALE FOR EPIDEMIC INTELLIGENCE (EI)

- The EI objective is to detect, using formal and informal sources (media internet...) health threats that may affect EpiSouth countries' population.
- In all countries devoted resources to public health are limited and duplication should be minimised as much as possible. The EI carried out by EpiSouth is initially based on the expertise developed since 2002, by the Institut de Veille Sanitaire (InVS).

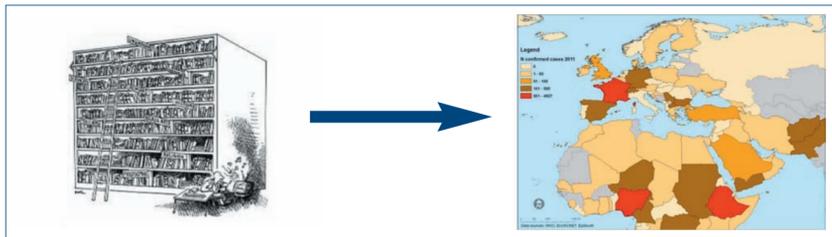


## EI DEFINITION AND CHARACTERISTICS

- EI aims to identify potential health risks for the EpiSouth countries population in all EpiSouth territories: travellers, immigrants and expatriates.
- EI complements "traditional" epidemiological surveillance
- EI is **NOT** "international surveillance" (i.e. no objective of exhaustivity)
- Tailored to respond to EpiSouth countries needs
- **Only verified** information disseminated
- Not limited to infectious diseases

## DETECTION OF PRIMARY SIGNALS

- Regular monitoring of official websites
  - WHO, OIE ...
  - ECDC, and other Regional networks ...
  - MoHs, MoAs ...
  - Public Health Institutes & Laboratories
  - Local partners : NGOs, private sector...
- Development of signal selection criteria and a validation strategy.



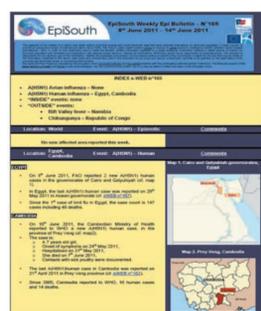
## CRITERIA FOR EPI SOUTH

- Geographical criteria**
  - Risk of spread to an EpiSouth country(ies)
  - Risk of imported cases
  - Countries of origin of migrants
  - Countries with expatriate community
  - Touristic destinations
  - Neighbouring areas
- Criteria related to the nature of the threat**
  - Mortality
  - Morbidity
  - Transmissibility / spread
  - Knowledge of the causal agent
  - Re-emergence of a previously controlled disease
- Criteria related to the nature of the agent**
  - Transmission mode
  - Severity
  - Lethality
  - Emerging phenomenon
  - Epidemiological changes
  - Geographical patterns of transmission

## EPI SOUTH TOOLS: 3 DIFFERENT FORMATS

### The EpiSouth Weekly Epidemiological bulletin

- e-Web:
  - Weekly epidemiological bulletin n=215 (as of 1<sup>st</sup> June 2012)
  - Every Thursday
  - In English, available on line, free
  - Sent automatically to recipients
  - Only verified information
  - Only alert of interest for EpiSouth
  - Contribute to countries' international threats monitoring
  - 754 events
  - 87 themes;
  - 137 geo. areas (01/06/2012)



## EpiSouth Thematic Notes

- **Thematic Notes ad hoc**
  - To further document special public event or outbreak or disease (CCHF, Melamine, Arenavirus, H1N1, Alkhurma, West Nile, Hajj pilgrimage, Olympic games, FIFA world cup, etc.)

## The EpiSouth Early warning System



- **Mediterranean Alert Early warning system**
- Secured web site (confidential)
- To share national alerts / confidential information
- Operational since November 09
- Accessible to
  - EpiSouth FP (NPHI, MoH)
  - Majors Stakeholders: WHO, ECDC, EC
- Complements existing systems : WHO, E.U. / ECDC
- **Overview of alerts posted on the platform:**
  - **115 Alerts/postings**
    - . 107 in EpiSouth countries - 94%
    - . 8 in non EpiSouth countries - 6%
  - . By year:
    - 2009: 21 postings (19%)
    - 2010: 58 postings (51%)
    - 2011: 34 postings (30%)
    - 2012: 2 postings
- **22 countries** (areas affected):
  - 77% from EpiSouth (n=17) vs 23% non-EpiSouth (n=5)
- **32 diseases**

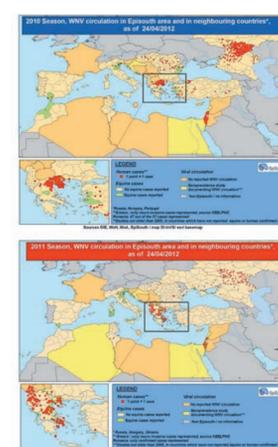
## EPI SOUTH SUPPORT TO MAJOR PUBLIC HEALTH CRISIS



### The Novel A(H1N1) pandemic in 2009

- **Source of data: EpiSouth countries**
- Data collected:
  - Confirmed cases
  - Case definition and case management
  - Deaths / severe cases
  - Transmission, circulation intensity
  - Imported VS local cases
- **Confirmed cases forwarded to ECDC** (esp. Middle-East, North African region)
- **Descriptive analysis on a weekly basis**
- **Information shared with the network:**
  - Daily bulletin (the first 2 months);
  - Twice a week (intermediate period)
  - Weekly bulletin (until the end)

## West Nile virus outbreaks in the Mediterranean area



- **2010 WN epidemic**
  - Unexpected high viral circulation.
  - Provided broad perspective of WNV circulation (Survey + case counts)
  - Heterogeneity of resources available for WN surveillance
  - Countries considering implementation of WN surveillance
- **2011 WN epidemic**
  - Similar dynamic compared to 2010.
  - 2010 was not an isolated event
  - Work performed in 2010 raised awareness on not fully operational surveillance in place
  - Surveillance systems have been strengthened in some countries
  - Articulation and synergies with other WP especially WP4-laboratory

## EPI SOUTH NETWORK PERSPECTIVES

### Global crises = Global response

- Common understanding and expectation from epidemic intelligence throughout the area
- It raised awareness on regional and cross-border issues
- Created trust, cohesion and concrete collaboration among PH officers of 27 countries
- Fills a gap in a region where countries belong to different political/supranational entities that is not addressed, as a whole, neither by the European Commission nor by WHO
- Need to strengthen public health information sharing in the area

Key role for regional networks

## Acknowledgements

The EpiSouth-Plus project is co-funded by the European Union DG SANCO/EAHC and EuropeAid together with the participating national partner Institutions.

The financial support of the Italian Ministry of Health and ECDC is also acknowledged.

The Project is led by The Italian National Institute of health and counseled by an Advisory Board composed by EC, ECDC, WHO and other international experts.

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