FINAL PROGRAM

14th International Congress on Infectious Diseases (ICID)

MIAMI, FLORIDA • USA • MARCH 9-12, 2010

Organized by the International Society for Infectious Diseases

With the

4th Regional Conference of the International Society of Travel Medicine

II Congreso Latinoamericano de Medicina del Viajero

In collaboration with the

Infectious Diseases Society of America (IDSA)
Pan American Association for Infectious Diseases (API)
Latin American Society of Pediatric Infectious Disease (SLIPE)

Poster Presentations

Riverfront Hall
Exhibition Area
Lobby Level
9.45 – 10:15hrs
12:30 – 14:30hrs
15:15 – 15:45hrs

Wednesday, March 10, 2010	Riverfront Hall	Sessions 23–34
Thursday, March 11, 2010	Riverfront Hall	Sessions 48–59
Friday, March 12, 2010	Riverfront Hall	Sessions 73–84

Wednesday, March 10, 2010

23 Antibiotic Resistance: Gram-Negative
24 Arboviruses
25 Clinical Bacterial Infections
26 Foodborne Diseases and Outbreaks
27 HIV: Epidemiology and Prevention
28 Influenza
29 Malaria & Blood-borne Parasites
30 Mycology, Fungal Infections and Antifungal Drugs
31 Non-tuberculous Mycobacteria
32 Travel Medicine and Travel Health
33 Tuberculosis: Epidemiology, Prevention & Control
34 Zoonoses and Infections in Animals

Thursday, March 11, 2010

48 Antibiotics: Mechanisms and Spectrum
49 Antibiotics: Pharmacology and Clinical Studies
50 Antibiotics: Usage and Stewardship
51 Epidemiology of Pathogens
52 Gram-negative Bacterial Infections
53 Hepatitis
54 HIV: Pathogenesis
55 HIV: Therapeutics
56 Infection Control, Nosocomial Infections and Critical Care
57 Infectious Diseases Surveillance
58 Parasites
59 Tuberculosis: Diagnosis, Treatment & Drug Resistance

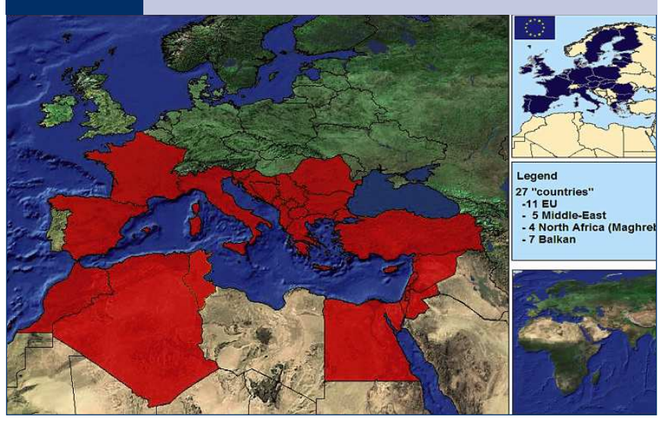
Friday, March 12, 2010

73 Animal Models, Pathogenesis & Host Defenses
74 Antibiotic Resistance: Gram-Positive
75 Diagnostics
76 Emerging Infectious Diseases
77 Gram-positives & Miscellaneous Pathogens
78 HIV: Opportunistic Infections & Malignancies
79 Obstetrical-Gynecological, Surgical and Sexually Transmitted Infections
80 Pediatric and Perinatal Infections
81 Mycobacterial Pathogenesis, Immunology and Vaccines
82 Trypanosomiasis, Leishmaniasis & Schistosomiasis
83 Vaccines and Vaccine Development
84 Virology and Viral Infections (Non-HIV)

The progressive expansion of the Novel A(H1N1)v epidemic in the EpiSouth region (Mediterranean and Balkans)

F. Aït-Belghiti, N. El Omeiri, J. Gueguen, M. Gastellu-Etchegorry, A. Rachas, S. Declich, MG. Dente and P. Barboza for the EpiSouth network and the Epidemic Intelligence team - French Institute for Public health Surveillance (InVS), France.

Figure 1 EpiSouth Potential Coverage

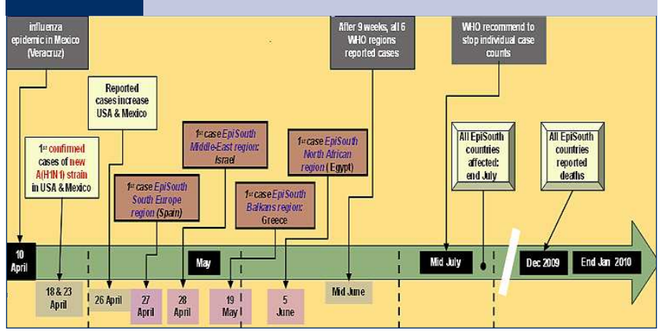


Structure of the EpiSouth network

- **EpiSouth objective:**
  Improve communicable diseases surveillance, communication and training across Mediterranean and Balkans countries
- The project is composed by 8 Workpackages (WP)
- The WPs are hosted in European public health institutes
  ➪ **4 technical WPs**
  - Epidemic Intelligence & cross border (InVS, France)
  - Vaccine preventable diseases & migrants (Bulgaria)
  - Emerging zoonoses (Greece)
  - Training (Spain)

  ➪ **4 support WPs**
  - Coordination, dissemination, evaluation, and network (Italy)
- **Duration:** Initial 3 Years period
- **Start:** December 2006 (in practice April 2007)
- **Funding:** European Commission + Italian MoH
- **Countries:** They actively collaborated to the project construction through their involvement in WP Steering Teams.
- **List of the 26 participating countries :**
  - South of Europe: Bulgaria, Cyprus, France, Greece, Italy, Malta, Romania, Slovenia, Spain
  - Balkans: Albania, Bosnia & Herzegovina, Croatia, Kosovo, FYRO Macedonia, Montenegro, Serbia
  - Middle-East : Israel, Jordan, Lebanon, Palestine, Syria, Tunisia, Turkey
  - North Africa : Algeria, Egypt, Morocco, Tunisia

Figure 2 A(H1N1) pandemic timeline in the region

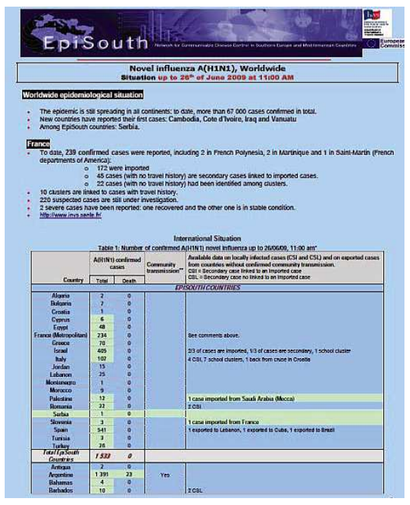


After July 2009, the number of confirmed cases was no longer representative and monitoring of pandemic progression was based on the reporting of confirmed deaths

Tracking A(H1N1) in the EpiSouth region

- Data source: EpiSouth countries
  - Data were provided on a voluntary basis by network focal points
  - And collected from: ministry of health, public health institutes, WHO.
- Type of data collected :
  - Case definition and case management strategies
  - Confirmed cases
  - Deaths / severe cases
  - Community transmission: virus circulation intensity
  - Imported vs. autochthonous cases
- A Descriptive analysis performed on a weekly basis
- The information was shared with the network:
  - Daily bulletin (in April and May 2009)
  - Twice a week (in June 2009)
  - Weekly bulletin (from July 2009 to January 2010)

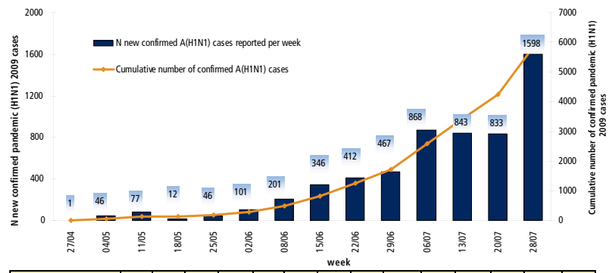
A total of 121 bulletins and messages were issued (from 27th April to 19th January 2010)



Results

- Confirmed A(H1N1) cases reported in the EpiSouth region (from week 17 to 31)
  - 8 weeks after the 1st confirmed case in the region, over 1200 cases were reported in two thirds of EpiSouth countries
  - On 16 July 2009, WHO recommended to discontinue individual cases count in countries where community transmission was established
  - At that date:
    - A total of 6,499 confirmed cases including 8 deaths had been reported in the region
    - Spain and Israel had reported the highest number of cases (1,538 and 1,520 respectively)
  - By the end of July 2009, all 26 EpiSouth countries had reported confirmed cases

Figure 3 Weekly number of A(H1N1) 2009 confirmed cases, EpiSouth region (as of July 2009)



Week	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Cumulative Nb of confirmed A(H1N1) cases	1	47	124	136	182	283	484	830	1242	1709	2577	3420	4253	5851
Number EpiSouth countries reporting cases	1	4	4	5	6	10	11	13	17	20	24	24	25	26

A(H1N1) Geographical spread

- As for other parts of the world, students, tourist, residents, or expatriates coming from areas with higher levels of community transmission travelled to less affected countries, hence increasing the level of imported cases in various countries
- The epidemic spread of the pandemic in EpiSouth region reflected:
  - The importance of links with North America
  - The extensive population movements within the Mediterranean area during summer vacations
- The 4 EpiSouth sub-regions were progressively affected by the A(H1N1) pandemic
  - Southern Europe was the 1st EpiSouth area affected
  - By end of May 2009, several Balkans countries reported confirmed cases
  - In June 2009, most of Middle-East countries declared community transmission
  - By Mid-July 2009, North African countries reported confirmed cases

Figure 4 Chronological A(H1N1) pandemic spread in the region (reported cases)

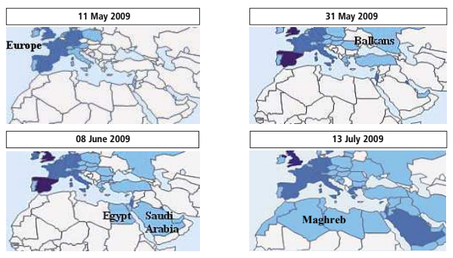
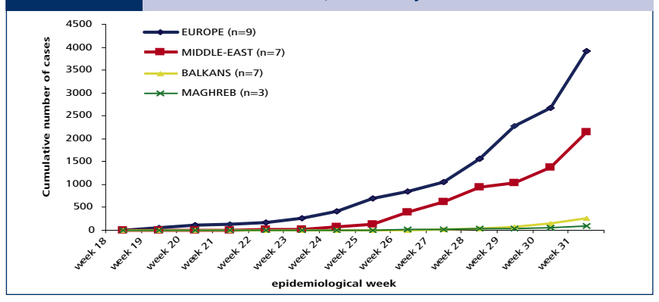


Figure 5 Evolution of the pandemic per week and by "sub-region": Cumulative number of A(H1N1)2009 confirmed cases, as of 28 July (week 31)*



** mid-July 2009, WHO recommended to stop individual counting of cases. After this date, the total number of reported cases is no longer representative.*

A(H1N1) related deaths and imported cases

- Deaths reported in the EpiSouth region (week 17 to 53) :
  - By the end of December 2009, 1,939 A(H1N1) related deaths had been reported
  - The 1st A(H1N1) related death in the EpiSouth region was reported in Spain (on 29 June 2009)
  - Until week 44, most cases and deaths were reported in Southern European countries
  - On week 45, the pandemic had spread to all 4 EpiSouth sub-regions.
  - By 07 December 2009 (week 49), all 26 EpiSouth countries had reported fatalities:
    - Southern Europe: 874
    - Middle East: 826
    - North Africa: 120
    - Balkans countries: 119
- Imported cases:
  - Importation of cases varied according to EpiSouth sub-regions
  - First imported cases in most Southern European countries and Israel originated from North America (Canada, Mexico & USA,) and to a lesser extent from South America and the Pacific. Transmission within EpiSouth was limited
  - For the Middle-East and North Africa, imported cases originated mainly from Europe (including EpiSouth Southern European countries) and other Middle Eastern countries (e.g. pilgrims returning from Saudi Arabia). Documented importation from North America was limited
  - Most imported cases into the Balkans originated from other European countries

Figure 6 Imported cases and respective countries of origin

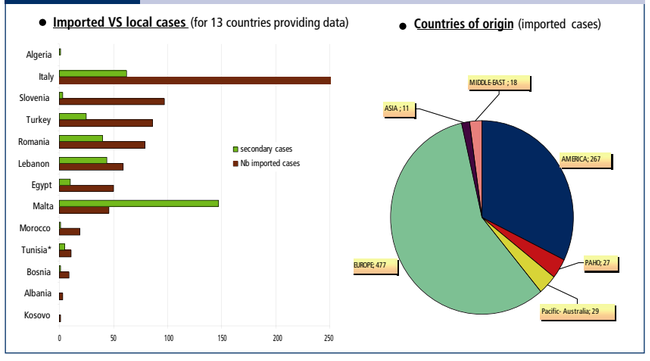
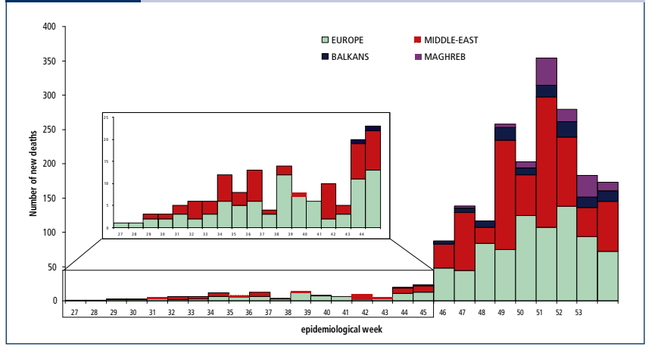


Figure 7 Number of A(H1N1) related death, per week of reporting in the 4 EpiSouth sub-regions, from April to December 2009



Discussion

- EpiSouth added value:
  - First compilation of data covering the Mediterranean and Balkans (3 WHO regions), information available in English
  - Unique access for regional daily update
  - Optimisation of epidemic intelligence and epidemiological analysis (reduced duplication)
  - Enhanced communication flow and expertise exchanges on:
    - case management, case definition, and vaccination strategies, etc
- The main limitations related to the systems:
  - Country specific surveillance systems: different characteristics (timeliness, sensitivity exhaustivity, geographic coverage, etc.)
  - Case definitions used (for case confirmation) were country specific
  - Access to laboratory confirmation varied in the region

Conclusion

- Phased dissemination of the pandemic in the region:
  - North Africa and Balkans affected later than other sub-regions
  - The dynamic of the pandemic illustrated the role played by population movements in EpiSouth countries
- Increased information sharing among affected countries
  - Countries affected later were in better position to anticipate
  - Usefulness in data sharing for
    - Elaboration of case definitions
    - Strategy for case detection and management
- Although countries of the Balkans and the Mediterranean Basin belong to different supranational organisations (3 WHO regions, EU & non-EU, etc), they share the same ecosystem, the same populations and a common history.
- The A(H1N1) pandemic underlined the importance of reinforcing information and expertise sharing across the region
- EpiSouth, is still a young network, but through this global crisis it proved that it can contribute to strengthen health security in the region in coordination with existing early warning systems especially WHO and ECDC

Acknowledgments to:

- Our colleagues at the International department in InVS (France): C. Baudon; S. Cohuet; MA. Degail; D. Dejour-Salamanca; V. Gauthier; M. Gharbi; S. Ioos; G. La Ruche; A.Tarantola; L. Vaillant.
- All the EpiSouth network and the 26 participating countries:
  ALBANIA, Tirana (Institute of Public Health); ALGERIA, Alger (National Institute of Public Health); BOSNIA & HERZEGOVINA (Ministry of Civil Affairs Sarajevo, Ministry of Health and Social Welfare, Banja Luka, Republic of Srpska, and Public Health Institute, Mostar, Federation of B&H); BULGARIA, Sofia (National Center of Infectious and Parasitic Diseases - NCIPD); CROATIA, Zagreb (Croatian National Institute of Public Health); CYPRUS, Nicosia (Ministry of Health); EGYPT, Cairo (Ministry of Health and Population); FYROM – Former Yugoslav Republic of Macedonia, Skopje (Institute for Health Protection and Clinic of Infectious Diseases); FRANCE, Saint Maurice Cedex (French Institute for Public Health Surveillance – InVS); GREECE, Athens (Hellenic Center for Diseases Control and Prevention – HCDCP); ISRAEL (Israel Center for Disease Control Tel Hashomer and Ministry of Health Jerusalem); ITALY (Italian National Institute of Health – ISS, Rome & Padua Teaching Hospital Padua); JORDAN, Amman (Ministry of Health); KOSOVO UNSCR 1244, Prishtina (National Institute of Public Health,); LEBANON, Beirut (Ministry of Public Health); MALTA, Msida (Ministry of Health, Elderly and Community Care); MONTENEGRO, Podgorica (Institute of Public Health); MOROCCO, Rabat (Ministry of Health); PALESTINE, Ramallah (Ministry of Health); ROMANIA Bucharest (Institute of Public Health - IPH/ISPB); SERBIA, Belgrade (Institute of Public Health of Serbia); SLOVENIA, Ljubljana (Institute for Public Health of the Republic of Slovenia - NIPH/IVZ-RS); SPAIN, Madrid (Carlos III Health Institute); SYRIA, Damascus (Ministry of Health); TUNISIA, Tunis (Ministry of Health); TURKEY, Ankara (Ministry of Health & Refik Saydam National Hygiene Center).

http://www.episouth.org/index.html

EpiSouth

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28.037

The progressive expansion of the Novel A (H1N1) v epidemic in the EpiSouth region (Mediterranean and Balkans)

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Background: EpiSouth is a network covering 26 Mediterranean and Balkan countries. Since April 2009, all continents have been progressively affected by the A(H1N1)v influenza pandemic.

Methods: In the scope of the project, EpiSouth countries shared, on a voluntary basis, information regarding their confirmed cases, case definitions and cases management strategies. Data concerning confirmed cases were analysed on a weekly basis.

Results: The first confirmed case was reported on the 27th of April in Spain. As of 06 July 2009, 2,577 confirmed cases were reported by 24/26 countries. The most affected country was Spain (776 cases) followed by Israel (681) and France (330). The pandemic spread within the four EpiSouth sub-regions was slightly different: the number of cases started to increase markedly first among EpiSouth EU countries (week 19), followed by Middle-East (week 23), and finally North Africa and Balkans (Week 27).

These different dynamics can be partly explained by the historical or socio-economical links existing between countries. The more rapidly affected EpiSouth countries (e.g. Spain, Israel or France) are those with close links (e.g. numerous direct daily flights with the Americas) while countries with less direct or frequent connections could delay longer the implementation of a local cycle of transmission. Later, population movements within EpiSouth countries also contributed to a further pandemic spread (e.g. cases exported from France to Algeria, Slovenia and Tunisia and from Spain to Lebanon and Serbia). The third phase was linked to relations with neighbouring areas e.g. Saudi Arabia exported cases to several EpiSouth countries.

Conclusion: While all countries were faced with the same difficulties regarding implementation of control measures, the ongoing information exchange between countries has proven its importance.

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28.038

An outbreak of influenza A pandemic (H1N1) 2009 in a residential home for the disabled in Hong Kong and detection of the first local case of oseltamivir-resistant infection

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Background: In Hong Kong, outbreaks of pandemic influenza A (H1N1) virus infection occurred in institutions since June 2009. The Centre for Health Protection (CHP) of the Department of Health carried out epidemiological investigation and provided oseltamivir chemoprophylaxis for residents of residential home for the physically and mentally disabled for confirmed influenza outbreaks. We described the epidemiological findings of an outbreak with a case of oseltamivir resistant infection detected.

Methods: We calculated the effectiveness of seasonal influenza vaccination 2008-2009 which comprised A/Brisbane/59/2007 (H1N1)-like virus, A/Brisbane/10/2007 (H3N2)-like virus and B/Florida/4/2006-like virus in protection against pandemic influenza A (H1N1) 2009, and the effectiveness of oseltamivir chemoprophylaxis. Thirty-four respiratory specimens (15 nasopharyngeal aspirates, 15 nasopharyngeal swabs and 4 throat swabs) were taken from 34 residents for realtime RT-PCR testing for pandemic influenza A (H1N1) 2009. All of the 21 positive samples were further tested for antiviral resistance.

Results: Seasonal influenza vaccination did not confer protection against pandemic influenza A (H1N1) virus (OR 2.23, 0.70 to 7.00; $p>0.05$), but oseltamivir prophylaxis was found to be effective in preventing disease (OR 0.31, 0.10 to 0.98; $p<0.05$). Overall compliance with oseltamivir chemoprophylaxis was satisfactory (94.5%). Two staff members who were offered oseltamivir reported early discontinuation due to side effects while two others did not start the medication at all. Oseltamivir resistance in influenza A (H1N1) virus infection was detected in one of the residents who had been given oseltamivir prophylaxis for 6 days. There was no evidence of spread of the resistant strain in the outbreak.

Conclusion: Oseltamivir chemoprophylaxis was effective in reducing the transmission of pandemic influenza A (H1N1) virus infection in long-term care facilities during outbreak. Clinicians, microbiologists and public health physicians should be alerted to the possibility of emergence of oseltamivir-resistant viruses in patients who have received chemoprophylaxis.

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28.039

Evaluation of direct immunofluorescent assay (DFA) and rapid antigen test (RAT) for diagnosis of new pandemic influenza A H1N1 2009 (FLU AH1N1) during first wave in Santiago, Chile

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Background: Since May 17th 2009 (epidemiological week 20th), the new strain of influenza A H1N1 was detected in respiratory samples of symptomatic patients in Santiago, Chile. The circulation of the virus lasted 11 weeks, with a peak between weeks 25-27th. The objective of our study was to evaluate the performance of influenza tests for diagnosis of FLU AH1N1.

Methods: Nasopharyngeal swabs were taken from in and outpatients with influenza like illness (ILI), between June 1st and July 19th of 2009 (weeks 23-29th) and the results of DFA and RAT were compared using RT-PCR FLU AH1N1 (Light mix Kit Influenza A virus M2 and Light Mix Kit FLU A swine