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Network for Communicable Disease Control in Southern Europe and Mediterranean Countries

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Location: Egypt Event: A(H5N1) – Human

- On 27 November 2009, Egyptian health authorities reported a new confirmed human case of avian influenza A(H5N1):

- A 3 yr old male from Al Minya Governorate (map 1.):
  - ✓ presented symptoms on 21 November,
  - ✓ was hospitalized on 22 November after he developed unspecified symptoms and received oseltamivir,
  - ✓ is in a stable condition.
  - ✓ he had close contact with dead and/or sick poultry.

- Since April 2006, Egypt has reported 89 confirmed human cases of avian influenza A(H5N1), 27 have been fatal.

Map 1: Al Minya Governorate, Egypt.

Comments

- **The occurrence of human cases of A(H5N1) in Egypt does not represent an unexpected event.**
- **Since 01 January 2009, Egyptian health authorities have reported 38 cases including 4 deaths. 8 cases had been reported in 2008, 25 in 2007 and 18 in 2006.**
- **To date, the available information does not indicate a change in the epidemiology of the virus.**

Location: Vietnam **Event: A(H5N1) – Human**

- Vietnamese health authorities reported a new confirmed human case of avian influenza A(H5N1):
- A 23 yr old male from the province of Dien Bien, north-west of Hanoi, (map 2.):
  - ✓ presented symptoms on 18 November,
  - ✓ was hospitalized on 25 November,
  - ✓ died on 28 November
  - ✓ he had had close contact with dead and/or sick poultry.
- An **avian** outbreak of A(H5N1) has recently been confirmed in the region (cf e-WEB 85).

Comments

- **Since the beginning of 2009, 5 A(H5N1) deaths have been reported by Vietnamese authorities.**
- **Since 2003, 111 cases and 56 deaths have been recorded.**
- **The occurrence of human cases of A(H5N1) is not unexpected in Vietnam.**

Map 2: Dien Bien province, Vietnam.

Location: World **Event: A(H5N1) – Epizootic**

No avian influenza outbreaks reported this week

Comments

REPORT OF NEW HEALTH EVENTS OCCURING OUTSIDE THE EPISOUTH AREA (not occurring in one or several EpiSouth countries)

Location: Saudi Arabia **Event: Floods**

- On Wednesday 25 November, torrential rains affected Jeddah and its surroundings (map 3.), the same region that hosts the annual Hajj pilgrimage in Saudi Arabia.
- Areas most affected were the districts to the east of the Jeddah-Mecca highway. Floods caused important destructions and damages to local infrastructure.
- According to authorities, the death toll is at least 77. 21 casualties have been identified as Saudi residents. The remaining are still under identification.
- The death toll is expected to rise, as many areas were completely submerged and difficult to access.

Comments

- **The Hajj pilgrimage with its difficult outdoors itinerary started on 24 November 2009. Such adverse meteorological conditions are likely to increase the risk of injuries and death of some 2.5 million pilgrims attending Hajj this year.**
- **Floods have often been associated with an increase in the incidence of vector borne diseases.**

Map 3: Jeddah, Saudi Arabia.

Location: World Event: Pandemic A/H1N1/2009

EpiSouth region

As of 1st November 2009 (9 am), a total of **756 deaths** among biologically confirmed A/H1N1/2009 cases have been reported in the **EpiSouth region** (Mediterranean and the Balkans). **258 new deaths** were reported since 24 November 2009:

- 3 (1st) deaths were reported in **Algeria**, 6 in **Croatia**, 11 in **Egypt**, 18 in **Mainland France**, 2 in **FYROM**, 4 in **Greece**, 15 in **Israel**, 25 in **Italy**, 3 in **Jordan,** 5 in **Kosovo**, 2 in **Morocco**, 2 in **Romania**, 6 in **Serbia**, 6 in **Slovenia,** 28 in **Syria**, 20 in **Spain** and 102 in **Turkey**.

For week 47, **influenza activity** was

- increasing in **Turkey**,
- high in **Albania**, **Greece**, **Slovenia**, and **Spain**.
- of medium intensity in **Croatia, France** and **Romania.**
- decreasing in **Italy, Bulgaria**, and **Serbia.**

  - **Turkey** reported an important number of A/H1N1/2009 deaths in the past week (102 since 24 November). The death toll reached 195 since the 1st death reported on 24 October 2009. 287 patients remain hospitalised, including around 100 in intensive care units.

  - In **Israel**, the countrywide increase in influenza-like illness in the community continued during week 46. In parallel, an increase was observed in the number of paediatric and adult visits to emergency rooms. During the past week an increase was observed in hospital mortality from all causes, above seasonal expected levels. 67.5% of specimens collected from the sentinel clinics were found to be positive for influenza.

  - The impact of pandemic A/H1N1/2009 on health infrastructure is severe in **Albania.**

  - In week 48, A(H1N1)2009 influenza virus circulation in **Mainland France** continues to intensify but with a slower increase than in week 47. The number of consultations for influenza-like illness in the community increased (sentinel surveillance). This increase occurred across all regions except Paris and its suburb region. Sentinel surveillance estimated that some 952 000 have consulted for respiratory infections related to A(H1N1)2009. 56 severe cases were recorded in week 48 (481 since the beginning of the pandemic). 14 of 92 A(H1N1)2009 deaths reported in **France** since the beginning of the pandemic did not present underlying conditions. The great majority of influenza viruses analysed during week 48 were A(H1N1)2009.

  - In **Italy** for week 47, the sentinel surveillance system of community health physicians (Influnet) reported an estimate of 680.000 new cases of A/H1N1/2009, thus less than the week before (752 000).

Reporting of mutations in the A(H1N1)2009 influenza virus

In week 48**,** reference laboratories reported to the French Institute for Public health (InVS) the detection of a **mutation in the A/H1N1/2009 influenza virus** genome. It was identified **in 2 A (H1N1)2009 confirmed patients** who subsequently deceased. Strains were characterized by a Gly222 mutation in the haemagglutinin that has been recently described in Norway and Denmark. It is thought to increase the capacity of the virus to reach the lower respiratory tract, especially lung tissue. The patients were not epidemiologically linked and had been hospitalised in different cities. In one of the patients, another mutation was observed that is known to confer resistance to oseltamivir (a Tyr275 mutation in neuraminidase). This was the first resistant strain reported in **France** upon analysis of 1200 strains since the beginning of the pandemic. It was also the 1st case of combined Gly222 and Tyr275 mutations. The occurrence of mutations in the A (H1N1) 2009 influenza virus is not unexpected. So far, there is no information suggesting spread in the community. The impact of these mutations on the pathogenic character of the virus and its capacity for spread is not yet documented and will be subject to further investigations.

Following the reports of mutations in the A/H1N1/2009 influenza virus in Norway, the **Italian National Institute of Health** (ISS) analysed the sequences of hundreds of A/H1N1/2009 isolates collected from patients diagnosed in recent months in Italy. The same **mutation** was found only **in one isolate** from a patient who recovered from severe pneumonia. None of the other patients, including those with more severe/deadly infection, carried the mutation. This mutation therefore does not seem to be spreading at this stage and has no effect on the efficacy of the vaccine or of antiviral treatment.

A(H1N1)2009 epidemiological situation at Hajj, Saudi Arabia:

- As of 01 December, 73 confirmed cases of A/H1N1/2009 and 5 A/H1N1/2009 deaths were recorded among Hajj pilgrims. All fatalities had underlying health conditions. Saudi health authorities reported an estimate of 10% A/H1N1/2009 vaccination among 2.5 millions pilgrims attending Hajj this year.
- Health officials collected swab samples for testing from pilgrims at Hajj accommodation sites to do a follow-up on A/H1N1/2009, including resistances. Data analysis is ongoing.

Global trends (outside the EpiSouth region)

- As of 30 November 2009, **8 568 deaths** related to A/H1N1/2009 have been reported worldwide (including EpiSouth countries).

The analysis of the various epidemiological and laboratory indicators since 24 November 2009 reflects the following trends:

- **Europe (non-EpiSouth countries)**: Influenza activity was medium to high in Northern and Eastern Europe in week 47. It was stable in **Luxembourg**, **Portugal, Scotland**, **Spain** and **Sweden**. It decreased in **Belgium, Ireland, Iceland, Norway, the Netherlands, the UK (Northern Ireland** and **Wales**). It increased in **Eastern Europe**. In most countries where influenza activity exceeded seasonal thresholds, those aged less than 15 years were the most affected age group. Numbers of intensive care hospitalisations remains high in Ireland, Norway, the Netherlands, Portugal and the UK. *Euroflu* (the European influenza network) reports an overall stable positivity rate (44%) (EpiSouth and non-EpiSouth Europe) with 91% if influenza viruses being A(H1N1)2009.

- **Ukraine** seems to have reached its epidemic peak. Influenza activity is decreasing across the country.
  In **Russia,** influenza activity remains very high and still increasing especially in the regions of Volga and Siberia.
  In **Moldavia**, influenza activity is very high with significant strain on the health infrastructure related to A(H1N1)2009.

- In the **Middle-East** (excluding EpiSouth countries)
  - **43 new deaths** were notified since 24 November: 40 deaths in **Iran**, 1 in **Kuwait**, the 1st death in **Libya** and 1 death in **Qatar.**
  - To date, **330 A/H1N1/2009 related deaths** have been reported among **non-EpiSouth countries** of the region.

- In the **United States**, influenza activity continues to decrease across all the States except New York and Maine where it is increasing. However, the number of consultations for influenza-like illness exceeds the national seasonal threshold (4.3% versus 2.3%) and regional thresholds in all 10 regions reporting for influenza surveillance. Mortality attributable to influenza and pneumonia has been over the seasonal threshold for 8 weeks.
  In **Canada,** the epidemic peak seems to have been reached in all regions and territories. Influenza activity remains high with higher numbers of hospitalisations and deaths than in previous weeks. However, the number of intensive care hospitalisations decreases.
  In **Mexico**, the number of confirmed cases and deaths continues to increase. Western and Central States are the most affected since the beginning of the 2nd wave. They are the States that were the least affected during the 1st wave.

- In the **Caribbean** and **Central America,** influenza activity continues to decrease.

- Most **South American** countries experience a decrease in influenza activity, except **Ecuador** and **Venezuela**.

- In **Asia**, the epidemic progresses in **Mainland China**, especially in regions entering the winter season.
  After a decrease in the previous week, viral circulation starts to increase again in **Japan.** Japanese authorities have recently reported a high number of encephalitis associated with A(H1N1)2009. The situation in **Thailand, Malaysia, Singapore** and **Hong-Kong** is stable. **India, Sri-Lanka** experience low A(H1N1)2009 influenza virus circulation.

- In **Sub-Saharan Africa**, the situation seems stable but the occurrence of outbreaks in some countries is suspected.

- In the **Pacific region**, influenza activity remains low in most countries.