EpiSouth Weekly Epi Bulletin – N°221
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INDEX e-WEB n°221

- A(H5N1) Avian influenza – none
- A(H5N1) Human influenza – Egypt
- "INSIDE" events:
  - Tick paralysis – Egypt
- "OUTSIDE" events: None:
  - Dengue - Djibouti

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

No epizooties reported this week

Location: Egypt	Event: A(H5N1) – Human	Comments

- On June 7th 2012, the Egyptian Ministry of Health reported to WHO a new human case of A(H5N1) infection, in Kafr- El Sheikh governorate (cf. map 1).
- The case is:
  - A 4 year-old girl;
  - Onset of symptoms on 25th April 2012;
  - Hospitalised on 26th April 2012;
  - Discharged on 7th May 2012;
  - Exposure to sick poultry was documented.
- To date, a total of 168 cases has been confirmed in Egypt, including 60 deaths.
- The last reported case in Egypt dated April 2012 in Giza governorate (cf. eWEB n°213).

Map 1. Kafr-El heikh governorate, Egypt.

REPORT OF NEW HEALTH EVENTS OCCURRING INSIDE THE EPISOUTH AREA
(Occurring in one or several EpiSouth countries)

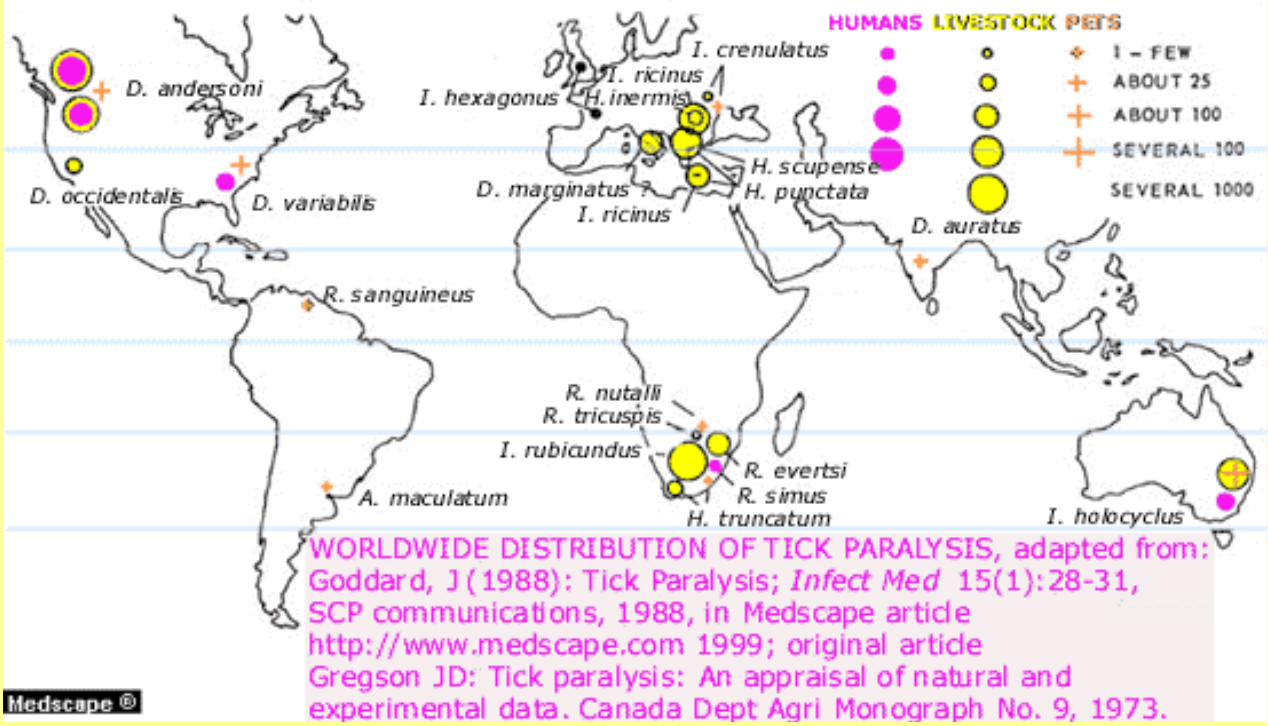
Location:	Egypt	Event:	Tick paralysis	Comments

- Mid June 2012, an article published by the Journal of the Egyptian society of parasitology suggested the occurrence of a tick paralysis in 4 human cases in Egypt.
- The cases, the first human cases ever reported in Egypt were 4 children living in rural area in Giza governorate:
  - The clinical pictures were confused and different clinical diagnoses were considered (rabies; myasthenia gravis; botulism; diphtheritic polyneuropathy).
  - Ticks were collected (from infested children), negative clinical data and biological data were in favour of Tick paralysis.
  - The encountered ticks infesting their animals were *Rhipicephalus sanguineus* on dogs, _*Hyalomma dromedarii*_ on camels and _*Hyalomma anatolicum excavatum*_ and _*Haemaphysalis*_ sp. on goats.
- Tick paralysis is very difficult to diagnose and no biological test can confirm the intoxination.
- Tick paralysis in human is rare and affects usually children under the age of 10.
- Tick paralysis has killed thousands of animals, mainly cows and sheep, in other parts of the world (cf. map 3); and is of concern in domestic animals and livestock in the United States.
- This is the first report of this disease in human in this area. The public health implication is difficult to assess at this stage.

- Tick paralysis is the only tick-borne disease that is not caused by an infectious organism.
- The illness is caused by a neurotoxin produced in the tick's salivary gland. After prolonged attachment, the engorged tick transmits the toxin to its host. Tick paralysis results from inoculation of a toxin from tick salivary glands during a blood meal.
- The incidence of tick paralysis is unknown.
- The toxin causes symptoms within 2–7 days, beginning with weakness in both legs that progress to paralysis. The paralysis ascends to the trunk, arms, and head within hours and may lead to respiratory failure and death. If the tick is not removed, the toxin can be fatal, with reported mortality rates of 10–12 percent, usually due to respiratory paralysis.

- No vaccine is currently available for any tick-borne disease, except for Tick-borne encephalitis. Individuals should therefore take precautions when entering tick-infested areas, particularly in the spring and summer months.

Map 2. Worldwide distribution of Tick Paralysis in humans, livestock and pets.
source: http://www.lowchensaustralia.com/pests/paralysis-tick/which-ticks-cause-paralysis.htm



REPORT OF NEW HEALTH EVENTS OCCURRING OUTSIDE THE EPISOUTH AREA
(Not Occurring in one or several EpiSouth countries)

Location:	Djibouti	Event:	Dengue	Comments

- The Ministry of Health of Djibouti reported 111 cases of "dengue-like" syndromes in Djibouti city (cf. map 3), between January and May 2012 (no further information available).
- Since November 2011, sporadic cases of dengue are reported regularly from Djibouti especially among French and Chinese expatriates.
- The serotypes DEN-1 and DEN-3 were confirmed by the French National Reference laboratory of arboviruses.

- Since the major outbreak of dengue documented in 1992 with nearly 12,000 suspected cases identified, only sporadic cases are reported in Djibouti.
- In 2010-2011, outbreaks of dengue were reported in Yemen, in Port Sudan (Sudan) and Jeddah (Saudi Arabia.
- The report of this dengue outbreak may reflect an increase of the virus circulation in Djibouti.
- Due to the large number of expatriates in this international port, imported cases of dengue fever in other countries cannot be excluded.

Map 3. Djibouti.