Information systems applied to epidemiological surveillance

Modular training



from November 25 to December 13,2013

3 weeks

(delivered in French)

In charge scientists

D.Chavernac, X.Juanès & A.Tran

(CMAEE UMR, SELMET UMR, AGIRS UR)

Issues

The establishment of epidemiological surveillance networks generates the collection of a large number of data that is necessary to properly manage to extract health information that will allow animal health officials to make the most relevant decisions of intervention. The diversity and complexity of data collected by the monitoring networks require the implementation of global information systems to achieve three main objectives: the regular edition syntheses of the health situation, the calculation of performance indicators and editing parameters of network management.

The geographic information system (GIS), part of a global information system is a tool that allows the geographical representation of spatial data and their analysis.

Based on information from the data collected through the global information system, it can for example allow the representation of all outbreaks reported for a disease, as well as their evolution in time and space. It is also easy to visualize clearly the animal population at risk and the means of intervention that may be available on the ground. Allowing quick and easy the construction and updating of maps representing health situation highlighted by an epidemiological surveillance network, GIS provides public officials of the animal health key elements for relevant and effective decisions.

Manage and process data of an epidemiological nature becomes a priority for those who have to analyze the information collected by a network of epidemiological surveillance, as well as units responsible for public health intervention on the ground.

Educational objectives

- At the end of training, participants will be able to design an information system in the simple case of an epidemiological surveillance network in order to manage the information from the field until its output:
- creating models for data management;
- analysis through simple queries;
- establishment of input interfaces (using Access);
- linking with GIS tools for such representation of the distribution of an animal disease and its evolution in time and space;
- produce thematic analysis and simple queries to represent and analyze data and produce cartographic materials to support the decision.

"CIRAD is a collaborating center to OIE for the diagnosis and control of animal diseases in tropical regions. The organization of training in this area is part of the mandate for this title."

If you are interested by this training in Cirad at Montpellier :

http://www.cirad.fr/ur/formation_elevage_en

Programme

- Databases applied to epidemiological surveillance 30h
  (discovery and getting started components ofAccess - Beware: based on the 2007 version of Access)
- GIS applied to epidemiological surveillance 30h
  (Getting started with ArcGIS 9.x, mapping, geographic objects, formatting maps)
- Practicals 30h

Admission

This course is open to veterinarians and animal scientists with responsibilities in the implementation and operation of epidemiological surveillance networks.

This course may be taken by candidates not belonging to these categories, but justifying sufficient professional experience.

Candidates must also master the French language correctly and have a good knowledge of the Windows environment, experience, albeit limited, in the handling and processing of data is a plus.

Training costs

- Pedagogic : 2 300 €
- Travel towards Montpellier : to be determined by participant
- Housing expenses : about 1 200€
- If necessary, a personalized estimate can be made upon request.


"Crédit photo CIRAD"

Important !!!
CIRAD is not able to provide scholarships. Requests should be submitted as soon as possible to :
Competent national authorities in charge of livestock and / or the granting of scholarships; Cooperation and Cultural Action Services (SCAC) of the French Embassy; Embassies of other countries; International organizations (FAO, UNDP, EU, IAEA, IDB, ...); Development projects or NGOs

Application procedure

Applications, consisting of a detailed resume, a motivation letter and details about the organization managing your grant, must be sent as much as possible before **November 2nd, 2013**,
by email : formation-emvt-fvi@cirad.fr or to the following address :

Equipe mixte CIRAD – FVI
Formation et Enseignement en Elevage et Médecine Vétérinaire en Régions Chaudes
TA A-15/B - Campus international de Baillarguet 34398 MONTPELLIER Cedex 5 France
Tel : 33 (0) 4.67.59.39.02 / Fax : 33 (0) 4.67.59.37.97
E-mail : marie-caroline.estienne@cirad.fr