



# ***“RECENT APPROACHES IN MODELLING ANIMAL INFECTIOUS DISEASES”***

***Agenda***

**SEPTEMBER 28-30, 2010**

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**INTERNATIONAL CENTRE FOR VETERINARY TRAINING AND  
INFORMATION (CIFIV) “F. GRAMENZI”  
TERAMO, ITALY**



## **Introduction**

Modelling animal infectious diseases is a useful tool for the decision making process. When correctly developed, epidemiological models may help Veterinary Services for control strategies evaluation, preparation of targeted contingency plans and for the prioritization of surveillance and control actions.

The workshop is an initiative of the OIE Collaborating Centre for veterinary training, epidemiology, food safety and animal welfare of Istituto "G. Caporale", Teramo (Italy) in collaboration with the OIE Collaborating Centre for animal diseases, surveillance systems, risk analysis and epidemiological modelling, Centers for epidemiology and animal health, (USDA-APHIS-VS-CEAH), Fort Collins, USA.

## **Objectives**

The main objectives of the workshop are:

- to evaluate the state of art on the current application of models;
- to describe the latest approaches in modelling animal infectious diseases - types of models which are being considered;
- to discuss about some examples of possible advantages for the Veterinary Services deriving from modelling animal infectious diseases;
- to discuss how to present outputs of models to decision-makers;
- to discuss data gaps in modelling animal infectious diseases.

## **Dates and workshop venue**

September, 28<sup>th</sup> – 30<sup>th</sup> 2010, International Centre for Veterinary Training and Information (CIFIV) "F. Gramenzi" of Istituto "G. Caporale", Teramo, Italy.

Date and location	Time	Tutor	Activity
28 September 2010 CIFIV	09,00	Secretariat	Participants registration
	<b>Session I (Presentations) "Introduction"</b>		
	09,15	V. Caporale R. Lelli	Welcome address Introduction to the workshop
	09,30	S. Weber K. Forde-Folle	Use of epidemiological models for the management of animal diseases
	10,15	S. Weber A. Giovannini	The surveillance of animal diseases and the development of epidemiological models
	11,00	<i>Coffee break</i>	
	<b>Session II.a (Presentations) "Modelling experiences"</b>		
	11,30	C. Poletto	Swine flu model
	12,00	T. Carpenter	Modelling wildlife/livestock disease transmission
	12,30	B. Martinez-Lopez	Social Network analysis
	13,00	<i>Lunch</i>	
	14,00	L. Holmstrom	Disease spread in feral swine populations: addressing gaps in knowledge and modelling approaches
	14,30	V. Guberti	The use of models for the surveillance and management of infectious diseases in wildlife: the example of CSF in wild boars and AIV in dabbling ducks
	15,00	K. Forde-Folle	Using models to develop estimates of the number of FMD vaccine doses needed in the event of an outbreak
	15,30	<i>Coffee break</i>	
	16,00	S. Weber	Model on Tb transmission
	16,30	J. Hofherr	On farm mortality for early detection of emerging diseases
	17,00	F. Natale L. Savini	EpiTrace: a tool for emergency management
	17.30	-	End of the training day

Date and location	Time	Tutor	Activity
29 September 2010 CIFIV	<b>Session II.b (Presentations) "Ongoing projects on modelling"</b>		
	09,00	P. Calistri F. Natale	Models based on movement networks. Italian experiences
	09,30	A. Reeves	Versioning, stability, verification, and validation of NAADSM
	10,00	K. Forde-Folle	Modelling the interfaces between livestock, vectors, wildlife and people – Results of three consultative reports
	10,30	<i>Coffee break</i>	
	<b>Working group I Validation and documentation of models</b>		
	11,00-13,00	<i>Items to be discussed</i>	<ul style="list-style-type: none"> <li>• Activities that have been employed to validate and verify models</li> <li>• Documentation recommended for supporting the scientific basis of the model</li> <li>• Issues that have been identified in development and application of models, which need to be addressed and possible collaborative efforts to resolve issues</li> </ul>
	13,00	<i>Lunch</i>	
	14,00		Working group I outcomes: presentation in plenary session

Date and location	Time	Tutor	Activity
29 September 2010 CIFIV	<b>Session III (Presentations)</b> "Advantages of the use of epidemiological models in disease control and eradication"		
	14,30	A. Giovannini	Use of epidemiological models to design surveillance
	15,00	K. Forde-Folle	Application of Modelling in Animal Health Policy – Course Outline prepared by the QUADS EpiTeam
	15,30	<i>Coffee break</i>	
	16,00	S. Weber	Take advantages from models: setting better targeted surveillance actions
	<b>Working group II</b> Next generation of models and potential for collaborations		
	16,30- 17,30	<i>Items to be discussed</i>	<ul style="list-style-type: none"> <li>• New approaches to modelling animal infectious diseases – where are we going?</li> </ul>
	17,30	-	End of the training day

Date and location	Time	Tutor	Activity
30 September 2010 CIFIV	<b>Working group II</b> Next generation of models and potential for collaborations		
	09,00-10,00	<i>Items to be discussed</i>	<ul style="list-style-type: none"> <li>Data gaps for current models and next generation models and identify potential projects to address these gaps – how do we get to where we want to be?</li> </ul>
	10,00	Working group II outcomes: presentation in plenary session	
	10,30	<i>Coffee break</i>	
	<b>Working group III</b> Training and dissemination		
	11,00-13,00	<i>Items to be discussed</i>	<ul style="list-style-type: none"> <li>Develop agenda for course to be taught to decision makers on application of models and interpretation of results</li> <li>Current status of articles requested for OIE publication</li> <li>Current status of Lexicon of modelling terms</li> <li>Value of training next generation of disease spread modellers</li> <li>Current status of parameter library and scenario bank</li> <li>Potential course on network analysis and network modelling?</li> </ul>
	13,00	Working group III outcomes: presentation in plenary session	
	13,30	-	Conclusions and end of the training day
	13,45	<i>Lunch</i>	
	14,30	<i>Departure to the International Airport</i>	