

**Patrizia Colangeli, R. Lelli. Development of an expert information system for the management of animal diseases epidemics**

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In the last ten years, the risk of introduction and spread of several major viral epidemics of list A diseases has been constantly increasing worldwide.

Italy, due both to its geographical position, in the middle of the Mediterranean basin, and to it being one of the world's largest importing countries of live animals and commodities of animal origin, is particularly at risk. Another important predisposing factor is the complete susceptibility of Italian animal populations.

All the available evidence shows that speed is vital in handling outbreaks of infectious diseases. This necessitates planning of a high order and an executive empowered by a wide acceptance of the strategies to be adopted.

This project aims to improve the managing skills of Veterinary Services in the event of an exotic disease outbreak, developing an integrated management system, of which one of the main sections is an information system able to guide and coordinate the services' activities while containing the outbreak.

The system has been initially tested in 4 Italian regions, markedly different as far as geographical features and farming practices are concerned: this has allowed us to develop a system better fitting the

remarkably uneven nature of Italian territory and livestock rearing. Presently, the system is in the adaptation stage to the entire national territory; new functions are being introduced, especially where report activities are concerned.

The following objectives have been achieved:

1. Contingency plans for list A diseases
2. Collection of relevant legislation
3. Development of a geographical information system (GIS), linked with the National Animal Identification System
4. Link with the European System for Animal Movements (ANIMO)
5. Implementation of a telematic system to support epidemics management
6. Training of personnel

This system provides the NHS with an information system for the management of disease epidemics; the system can be used as a decision tool by every level of the NHS: central (Ministry of Health), regional (Regional Veterinary Agencies) and local (Veterinary Services operating locally).

It will be possible to introduce the new version in the EU.