

Implementation of a new contingency plan for bluetongue disease in Italy

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Summary

Since the first appearance of bluetongue (BT) in Italy in late August 2000, the ecology of vectors and the environmental conditions affecting their distribution and survival proved to be the most difficult factors to monitor, and represented a serious challenge to the effectiveness of the National Contingency Plan promulgated in 1991. Moreover, the Italian Ministry of Health considered the national management plan of BT inadequate to prevent further spread of the disease. The authors describe the implementation of a new BT contingency plan, integrating an operations manual and an ad hoc information system, which operated also as a decision-support system both at local and central levels. The plan describes the national capacity for dealing with BT outbreaks, the composition and duties of the National Disease Control Centre and Local Disease Control Centres, the chain of command and the strategies adopted.

Keywords

Bluetongue – Contingency plan – Control strategies – Emergency management – Emergency preparedness – Epidemic – Italy – Trade.

Commission conducted an inspection in Italy to monitor the implementation of the foot and mouth disease, classical swine fever (hog cholera) and bluetongue (BT) contingency plans.

Following the inspection, a number of recommendations were submitted to the Italian Ministry of Health. The recommendations included the need to:

- integrate the provisions of Directive 2000/75/EC (7) into national legislation
- better define a chain of command and to establish a national disease control centre (NDCC)
- immediately implement a contingency plan for the management of BT outbreaks (6).

On receipt of these recommendations, the Italian Ministry of Health decided to implement a new contingency plan for BT disease having regard to Directive 2000/75/EC and its national transposition law (1), to Commission Decision 91/42/EEC (4) and to Commission guidelines on contingency

planning (3, 5). The plan meant that technical memoranda drawn up after the first appearance of the disease in 2000 were revised and transformed into a set of complete instructions. The contingency plan drafted by the National Reference Centre for Exotic Diseases in Teramo (*Centro Studi Malattie Esotiche*) was developed through an ad hoc information system and was supported by an operations manual, in accordance with Commission guidelines. The operations manual gives details of the actions to be taken at all institutional levels in response to suspected and confirmed outbreaks, and is aimed at improving the decision-making capabilities of veterinary units.

Activities and results

The following activities were conducted when implementing the integrated system for the management of BT epidemics:

- drafting of BT contingency plan and operations manual

Control and trade

- simplifying technical procedures for the updating of existing regulations to react promptly to changes in the epidemiological patterns of the disease, and of the European regulation dealing with the disease in Italy
- supplying regional veterinary offices with the necessary software for the management of veterinary activities
- implementation of a computer network, linking veterinary services and the National Reference Centre for Epidemiology
- implementation of a geographic information system (GIS) connected to a domestic animal identification database
- setting up an experimental telematic support system for emergency management
- staff training
- supplying all the necessary tools, equipment and materials to veterinary personnel.

Legal powers and chain of command

Regionalisation, recently strengthened by Constitutional Law No. 3 of 18 October 2001 (2), implies a substantial levelling of authority between central and local authorities. Difficulties exist in the interactions between these two authorities and in identifying roles and responsibilities both at strategic decision-making and operational levels. The BT contingency plan is a tangible example of the way to solve the aforementioned difficulties. The plan identifies an intervention strategy that attributes an essential role to the central level, with regard to the control of Office International des Épizooties (OIE) 'List A' disease outbreaks.

The adoption of this strategy is backed by the definition of OIE List A diseases that necessarily imposes outbreak control and management at a central level: 'transmissible diseases which have the potential for very serious and rapid spread, irrespective of national borders, which are of serious socio-economic or public health consequence and which are of major importance in the international trade of animals and animal products' (8). Within this framework, regional control authorities are responsible for the monitoring of the correct implementation of control actions in compliance with directives given by the Italian Ministry of Health and have a supervisory role over local authorities. The structure of the chain of command is presented in Figure 1.

Following the outbreaks of BT in 2000, the Italian Ministry of Health decided to implement a

surveillance programme with the following objectives:

- conduct surveys for the presence/absence of virus circulation throughout the country
- monitor the status of free areas
- identify BT seasonally free zones.

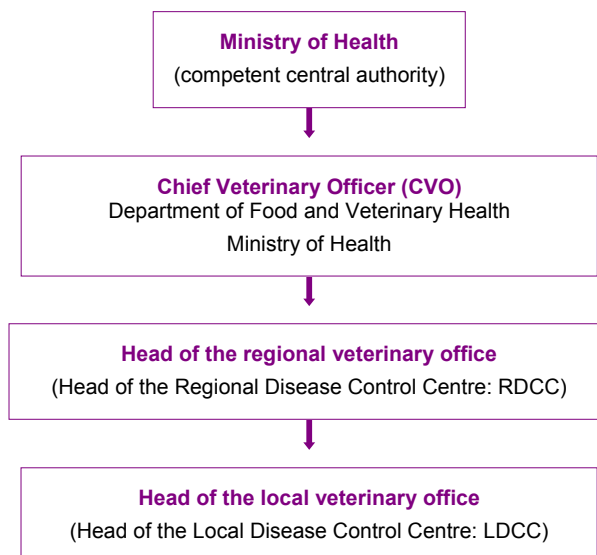


Figure 1
Chain of command for the management of an emergency animal health incident involving an OIE 'List A' disease

The surveillance programme was adopted by ministerial decree of the Italian Ministry of Health. The measures that form the programme are listed in the ministerial decree and include activities to be implemented to control disease outbreaks (i.e. vaccination programme, instructions for animal movement and transhumance, serological and entomological surveillance).

The ministerial decree authorises the Chief Veterinary Officer (CVO) to amend the enclosures of the ministerial decree with individual measures. When needed, this strategy enables the amendment of the operative component of the national regulation without delay.

In the event of changes to existing regulations or changes in the epidemiological pattern of the disease, the CVO may resort to delivering technical memoranda in which instructions are provided on how certain activities should be conducted. In this way, all control measures are adopted, managed and monitored at the central level. This approach is an effective method to control a disease transmitted by vectors which spread infection well beyond regional boundaries.

Disease control centres and other operational institutions

The plan describes the structures, duties and functions of the NDCC, RDCCs, LDCCs and other operational institutions. The management of disease surveillance and control is subdivided into ‘peace-time’ and emergency management for didactic reasons. During ‘peace-time’ management, the NDCC, RDCCs and the LDCCs promote all activities necessary to maintain and develop expertise to ensure disease preparedness while, during emergency management, the NDCC, under the provisions of the competent central authority and with the contribution of expert groups, co-ordinates the adoption and

implementation of surveillance and control measures adopted by the regional authority and implemented by the LDCC.

The regional control authority plays an important role in the adoption and co-ordination of control measures emanating from strategic options made by decision-making authorities. The BT emergency communications flowchart is illustrated in Figure 2. The competent institutions are divided into political-administrative and technical-operational institutions due to the fact that all veterinary and zootechnical provisions must be adopted within legal-administrative acts, including financial backing for the activities implemented.

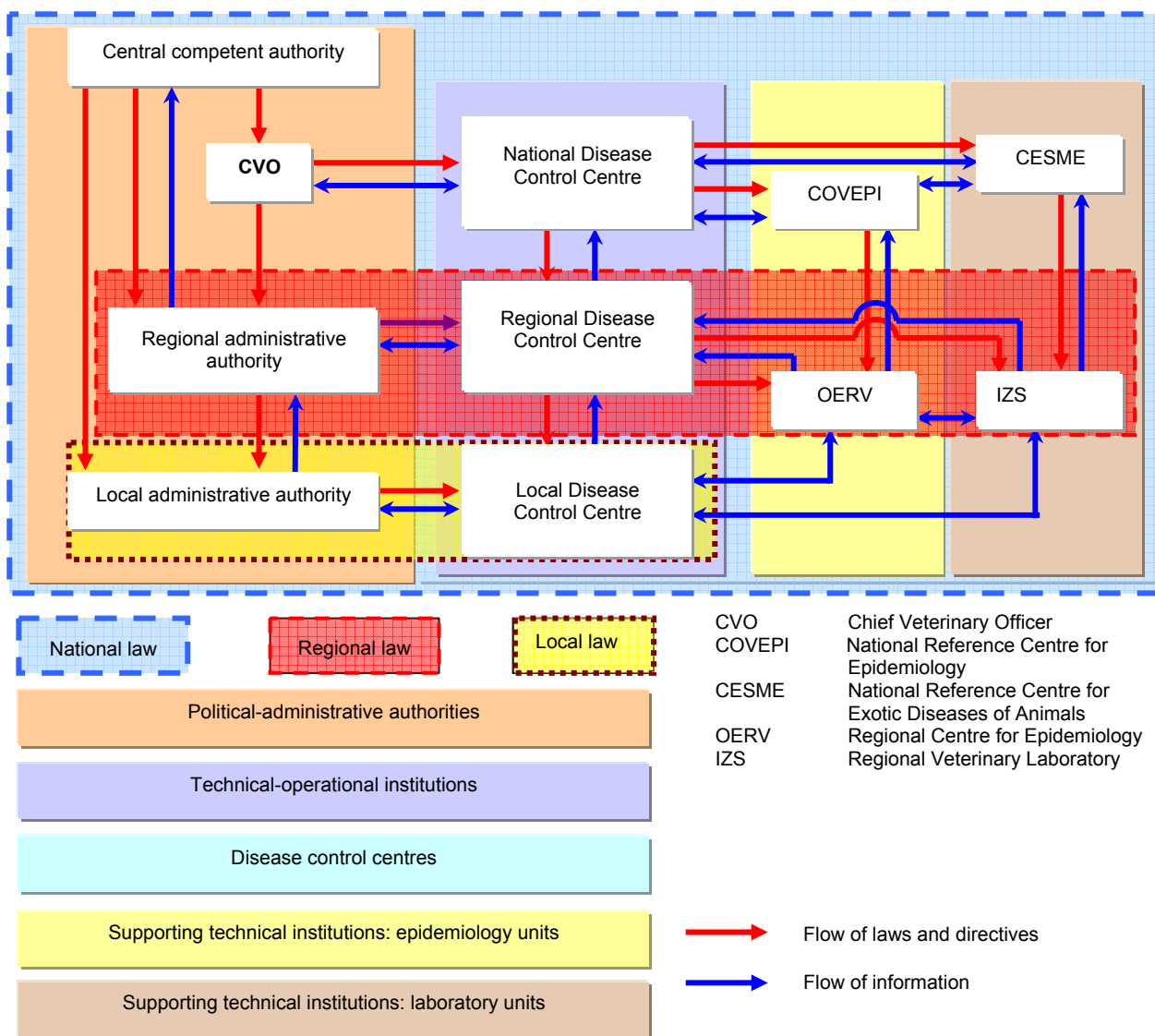


Figure 2
Flowchart showing the bluetongue emergency communications network

Problems to be solved

The principal political-institutional problems concerning the BT control and contingency plan still to be solved are:

- 1) The change to the overall institutional structure of Italy together with the reinforcement of the regional legislative power. Regions can adopt self-governing regulations that have been transposed from EU legislation. In the future, more effort will probably be required from the Ministry of Health to co-ordinate disease control strategies across Italy.
- 2) The need to create additional legal-administrative tools that will allow the involvement of other institutions (i.e. army and civil protection unit) to facilitate staff recruitment, purchase of equipment and funding.
- 3) The need to revise criteria for the allocation of financial resources and the amount of financial resources to be made available by the Italian National Health Fund. Funds should be available not only to face an emergency but also for all strategic programming activities.

The main technical problems to be solved are as follows:

- complete the telematic support system for emergency management;
- extend the GIS application to include all animal holdings nationwide and to have staff and resources available to better define the control measures that should be adopted.

References

1. Anon. (2003). – Decreto Legislativo 9 luglio 2003, n. 225, attuazione della Direttiva 2000/75/CE relativa alle misure di lotta e di eradicazione del morbo 'lingua blu' degli ovini. *Gazz. Uff. Pubbl. Ital.*, **194**, 22 August 2003, Supplemento Ordinario No. 138 (parlamento.it/leggi/deleghe/03225dl.htm accessed on 15 August 2004).
2. Anon. (2001). – Legge costituzionale 18 ottobre 2001, n. 3, modifiche al titolo V della parte seconda della Costituzione. *Gazz. Uff. Pubbl. Ital.*, **248**, 24 October 2001 (parlamento.it/leggi/eelenium.htm accessed on 15 August 2004).
3. Commission of the European Communities (1995). – Contingency plans for epidemic diseases. European Commission, Brussels, Doc. VI/5211/95-EN.
4. European Commission. (1991). – 91/42/EEC: Commission Decision of 8 January 1991 laying down the criteria to be applied when drawing up contingency plans for the control of foot and mouth disease, in application of Article 5 of Council Directive 90/423/EEC. *Off. J.*, **L 023**, 29-30.
5. European Commission (1998). – Guidelines for FMD contingency plans in non-vaccinating countries. European Commission, Brussels, Doc. VI/5707/98 Rev. 0.
6. European Commission (2003). – Final report of a mission carried out in Italy from 17 to 21 February 2003 in order to review action taken by the competent authorities with regard to the contingency plans for foot-and-mouth disease, classical swine fever and bluetongue. DG (SANCO)/9078/2003 – MR Final. European Commission, Brussels, 16 pp (europa.eu.int/comm/food/fs/inspections/vi/report_s/italia/vi_rep_ital_9078-2003_en.pdf accessed on 15 August 2004).
7. European Council (2000). – Council Directive 2000/75/EC of 20 November 2000 laying down specific provisions for the control and eradication of bluetongue. *Off. J.*, **L 327**, 74-83.
8. Office International des Épidémiologies (OIE) (2003). – Terrestrial animal health code, 12th Ed. OIE, Paris (oie.int/eng/normes/mcode/A_summry.htm accessed on 14 August 2004).