

The veterinary surgeon in natural disasters: Italian legislation in force

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Summary

Law No. 225/1992 established a National Service of Civil Protection, with the important role of 'safeguarding life, goods, settlements and the environment from damage deriving from natural disasters, catastrophes and calamities' (art. 1). This law arranges civil protection as a co-ordinated system of responsibilities administered by the state, local and public authorities, the world of science, charitable organisations, the professional orders and other institutions, and the private sector (art. 6). The President of the Republic's Decree No. 66/1981 'Regulation for the application of Law No. 996/1970, containing norms for relief and assistance to populations hit by natural disasters – Civil Protection' mentions veterinary surgeons among the people that are called upon to intervene. In fact, in natural disasters the intervention of the veterinary surgeon is of great importance. The authors examine these laws and other legislation relating to the National Service of Civil Protection.

Keywords

Animal protection – Calamity – Civil protection – Italy – Legislation – Natural disaster – Norm – Veterinary surgeon.

Introduction

In many European countries, there is currently a major focus on improving co-operation between services involved in Civil Protection, with the aim of creating an early warning system for the more important risks and improving the provision of assistance in natural disasters. Recurring states of emergency, which have been dangerous to both people and animals, and which have caused great damage in Italy, mean that the country is now internationally recognised as having a lead role to play in the development of effective solutions in areas such as non-epidemic veterinary emergencies. This prominent role was confirmed when the Health Department issued Circular No. 11 of 18 March 1992, which established the working plan for Veterinary Service emergency action (3) and when the Civil Protection Department included an expert veterinary surgeon in the Health Section of the National Committee for the Prevention of Great Risks. It has become apparent that there is a need to establish an 'Emergency Veterinary Service', which

can not only solve logistic, health and management problems, but is also able to deal with the media.

In order to plan and co-ordinate operational emergency assistance for human health and animal welfare, competent authorities (Mayor, Government Representative, Civil Protection Department) in at-risk areas must have an emergency plan which is in line with national animal protection laws (2, 4, 6, 10, 11, 13). The establishment of such a plan must be considered an essential part of Veterinary Service activities. The plan must be prepared in advance of any possible natural disaster and must be tested with simulations in order to reduce the negative consequences of events that, by their very nature, can only be approximately predicted.

The guidelines of this working plan need not cover emergencies caused by epizootics, because intervention in cases of infectious and epidemic disease is already outlined by European Union (EU) Directives (15, 16).

Non-epidemic emergencies can be of various kinds, but in Italy, the most serious are those caused by volcanic eruptions. In some Italian regions, there is more than one high-risk area, especially in those regions where explosive eruptions are likely and where there is a high population density. The two areas of this type at greatest risk are both in the Naples area, one near Mount Vesuvius and the other in the Phlegrean Fields. In Sicily, apart from the Aeolian Islands, Etna is the most active volcano, and its eruptions can cause severe damage.

Current legislation

In natural disasters, the intervention of the veterinary surgeon must be prompt, specialised, and aimed at re-establishing proper animal health conditions, as stated in article 32 of the Italian Constitution.

In the past, the President of the Republic's Decree (DPR) No. 66 of 6 February 1981 'Regulation for the application of Law No. 996 of 8 December 1970, containing norms for relief and assistance to populations hit by natural disasters – Civil Protection', provided for veterinary expertise in three different articles (art. 43, 44 and 46) (1).

Law No. 225 of 24 February 1992 (5) created the National Service for Civil Protection 'to protect and guarantee the integrity of life, properties, settlements and the environment against damage caused by natural disasters and other catastrophes' (art. 1). This law establishes the Civil Protection Service as a co-ordinated system, in which the State, local and public boards, the scientific community, voluntary associations, professional orders and other institutions, both public and private, all participate (art. 6).

The DPR No. 613 of 21 September 1994 contains the norms which regulate the participation of voluntary associations in Civil Protection activities (7). Also, Italian Legislative Decree No. 112 of 31 March 1998 (9), which applies paragraph I of Law No. 59 of 15 March 1997 (8), confers the State's functions and administrative tasks on the regional administration and other local bodies (provincial or town councils, mountain communities, public territorial organisations, any other public or private organisations in Italy which work in the field of Civil Protection – paragraph VIII, art. 107). Thus, in the case of natural disasters, specialised experts within the local health authorities (Azienda Sanitaria Locale: ASL) must judge whether they are capable of managing the emergency on their own or whether they need outside assistance.

Since 1985, the EU has been working to establish effective mechanisms, based on the principle of subsidiarity, for reinforcing co-operation between authorities involved in civil protection in the EU.

In 1998, following the adoption by the European Council of a two-year civil protection action programme (1998-1999), the Commission launched several major projects in close co-operation with civil protection authorities in Member States. The purpose of all these projects is to establish common rules and guidelines and to provide networking opportunities for experts in the relevant fields (12).

Over recent years, with the intention of strengthening co-operation in civil protection activities and co-ordinating action in the case of catastrophic events, the EU has adopted several Council Regulations, as follows:

- Resolution of the Council and of the representatives of the Governments of the Member States of 23 November 1990
- Resolution of the Council and of the representatives of the Governments of the Member States of 8 July 1991
- Resolution of the Council and of the representatives of the Governments of the Member States of 31 October 1994
- Resolution of the Council and of the representatives of the Governments of the Member States of 9 December 1999
- Resolution of the Council and of the representatives of the Governments of the Member States of 26 February 2001
- Resolution of the Council of 28 January 2002.

The Ministry of Health followed this line of action and prepared organisational guidelines regulating the work of Veterinary Services in emergencies. These guidelines include the methods and information necessary for up-dating personnel in technical matters and preparing Veterinary Service emergency intervention plans.

Veterinary Service responsibilities

It is not possible to react effectively and efficiently to a disaster unless the response has been planned well in advance on the basis of a comprehensive risk assessment and unless the measures to be taken by the organisations, institutions and government bodies involved have been co-ordinated and carefully rehearsed. No matter what the causes of a disaster, it is a fact that the effects – and thus the threat that the disaster poses to man and his natural environment – are forever increasing and, because of their complexity, becoming more and more difficult to assess and contain.

In Italy, the experts who decide whether conditions allow for autonomous action or whether outside assistance needs to be requested through the local representative of the Government (Prefetto) are to be found in organisations connected to the ASL. Three operational sectors answer to the ASL, as follows:

- a) animal health

- b) hygiene for food processing and sales
- c) farm hygiene.

These sectors, together with the Multizonal Veterinary Prevention and Protection groups, are responsible for the following:

- disinfection and disinfestation
- capture and care of stray animals
- assistance, housing, feeding and where necessary, medical care of animals
- dog shelter management
- animal waste disposal, carcass collection and disposal
- intervention in the case of epizootics
- storage and preservation of food of animal origin
- training and up-dating personnel.

The Veterinary Services of the regions and the autonomous provinces are responsible for co-ordinating the work of different zones and preparing regional and inter-regional ‘risk maps’. They also act as a link between the competent authorities and international organisations. In the event of an emergency a member of the Veterinary Service personnel is chosen to act as a co-ordinator for preparatory and operational emergency activities.

The Institutes of Experimental Zooprophyllaxis also participate when emergencies occur by providing constant assistance and giving instructions for sample taking in various risk situations.

Hypothetical plan of action and procedures

To discuss possible action plans and procedures during volcanic emergencies a hypothetical eruption of Vesuvius will be used as an example. The volcanic activity of Vesuvius is shown in Table I.

Table I
Volcanic activity at Mount Vesuvius at different moments in history

Intensity	Description and date
Marked	79 AD: a plinian eruption. These eruptions are large explosive events that form enormous dark columns of volcanic rock, glass fragments and gas, high in the air.
Medium	1631: a subplinian eruption. These eruptions are less powerful than plinian eruptions but are still explosive and can still be devastating
Weak	1637-1944: effusive eruptions. These eruptions are non-explosive and are characterised by an outpouring of lava

Areas at greatest risk from the eruption are designated as the ‘red area’ (consisting of eighteen towns in the province of Naples), which should be evacuated as soon as volcanic activity starts to reach the ‘critical limit’, as defined by vulcanologists. Areas that are not in immediate danger but that could be affected by the eruption are designated as the ‘yellow area’ (consisting of fifty-nine towns belonging to the provinces of Naples and Salerno).

All this territory (Campania) has large numbers of livestock. According to statistical data from the Istituto Zooprofilattico di Portici (Naples) (17), in the red area there are 1,200 bovines, approximately 700 sheep and goats, 30,000 swine, around 700 horses, 30,000 rabbits and 450,000 poultry. There are also a large number of stray dogs in the disaster area; statistics indicate about 6,000, but the actual number could be higher. There are about 60,000 pet dogs (one dog for every ten citizens) and there are similar numbers of cat colonies (stray and pet cats).

Typical veterinary emergency intervention can be divided into different operating stages: the first stage is preparatory and the second is the emergency itself, preceded by specific training. Specific training plays a central role in emergency planning, because veterinary surgeons do not have the specialist skills needed to face non-epidemic emergencies. However, general action guidelines for natural disaster management are very similar to those used in the management of epidemics.

Preparatory stage

After a preliminary intervention to evaluate geographic features, which could be changed by the eruption, the next step is to identify the level of efficiency of agricultural, livestock and animal product facilities. Priorities for intervention, and a list of the personnel who will be involved in the various stages of intervention, should be established in advance. It is important to collect detailed information about veterinary matters, such as the following:

- the livestock and pets census (as required by EU legislation) and stray dog statistics
- the location and number of livestock farms, stables, and other animal facilities
- the location and capacity of slaughter houses and warehouses for storing animal feed.

A timetable for evacuating livestock must be devised, taking into consideration the available transport, road viability and livestock numbers.

Operational stage

During emergencies, the operative units of each ASL should act to guarantee emergency services, such as the following:

- the collection and disposal of carcasses

- the provision of emergency animal shelters
- veterinary inspection of the production and delivery of food of animal origin
- capture and management of stray animals
- care and registration of animals.

Every ASL must be equipped with up-to-date animal registers and all other relevant information. The ASLs are also responsible for implementing national plans for preventing infectious diseases (DPR 8 February 1954 No. 320) and preventive measures against rabies. Finally, the ASLs must know how to deal properly with all the media so as to avoid any kind of unfair judgement or misinterpretations which could cause unjustified alarm or panic.

In view of these considerations, it would be useful to establish several first aid task forces in each ASL, which would include a range of professionals with appropriate skills (veterinary surgeons, doctors, hygienists, etc.). This team, once it had identified the type of the emergency, would evaluate hydro-geologic, livestock and anthropological factors, and then, identify where veterinary intervention was necessary. It is important to study the territory and its features, the land and livestock registers, keeping in mind laws about stray pets (Law No. 281/91) (2) and livestock registers (DPR No. 437/00) (14), and to compile a catalogue of the resources needed to cope with such events and their possible complications. In this way, an effective working plan can be established to manage non-isolated action in co-operation with other associations, in accordance with art. 11 of Law No. 225/92.

Conclusions

In Italy, veterinarians have an important role to play in implementing effective solutions in situations such as non-epidemic veterinary emergencies.

A well-prepared emergency plan is the best way in which the competent authorities in at-risk areas can prepare and co-ordinate assistance which will safeguard human health and animal welfare, in line with national animal protection laws.

The intervention of veterinary surgeons must be prompt, and should focus on re-establishing suitable animal health arrangements. They must decide whether they are capable of managing the emergency on their own or whether they require outside assistance.

Natural disasters are a sequence of several different emergencies, each requiring specialised and varied intervention. Public health issues can be easily classified, but the priorities for intervention may vary. Effective management will depend on immediate action, the skills of the practitioners and their ability to co-ordinate effectively.



Le vétérinaire face aux catastrophes naturelles : la législation italienne en vigueur

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Résumé

Le Service national de protection civile a été créé en application de la loi 225/1992, qui lui attribue un rôle important : « protéger la vie, les biens, les installations et l'environnement contre les dommages provoqués par les catastrophes naturelles, les désastres et les calamités » (Art. 1). Cette loi dispose que la protection civile se présentera comme un ensemble coordonné de responsabilités exercées par l'État, les autorités publiques locales, le monde scientifique, les associations caritatives, les organismes professionnels et diverses institutions, ainsi que le secteur privé (Art. 6). Le décret présidentiel 66/1981 intitulé « Règlement d'application de la loi 996/1970 intégrant les normes applicables aux secours et à l'assistance des populations frappées par les catastrophes naturelles – Protection civile » mentionne explicitement les

vétérinaires parmi le personnel d'intervention. L'intervention du vétérinaire durant les catastrophes naturelles est effectivement très importante. Les auteurs examinent ces lois ainsi que la législation relative au Service national de protection civile.

Mots-clés

Calamité – Catastrophe naturelle – Italie – Législation – Norme – Protection civile – Protection des animaux – Vétérinaire.



El veterinario en caso de desastre natural: legislación italiana vigente

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Resumen

En virtud de la Ley 225 de 1992 se estableció un Servicio Nacional de Protección Civil, al que se encomendaba la importante función de 'proteger vidas, bienes, asentamientos y medio ambiente de los daños ocasionados por desastres naturales, catástrofes y calamidades' (Art. 1). En dicha ley se concibe el servicio de protección civil como un sistema coordinado de responsabilidades que administran autoridades estatales, locales y públicas, así como el mundo científico, organizaciones de beneficencia, círculos de profesionales y otras instituciones, además del sector privado (Art. 6). Entre los sectores llamados a intervenir que se mencionan en el Decreto 66 de 1981 del Presidente de la República, titulado 'Reglamento de aplicación de la Ley 996 de 1970, con normas para socorrer y ayudar a las poblaciones afectadas por desastres naturales: Protección Civil', figuran los veterinarios. De hecho, la intervención de este colectivo reviste gran importancia en caso de desastre natural. Los autores examinan esta y otras leyes relativas a los servicios nacionales de protección civil.

Palabras clave

Calamidad – Desastre natural – Italia – Legislación – Norma – Protección animal – Protección civil – Veterinario.



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