

The role of Veterinary Services in animal health and food safety surveillance, and coordination with other services

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Summary

The control of animal health and food safety has undergone profound changes and is now seen in terms of a global approach, 'from the stable to the table'. The risks themselves have also evolved, principally due to changing practices, and this, coupled with increased knowledge and changes in consumer demands, has led to a more global conception of production chains.

In terms of official controls, targeted control of the final food product has gradually been replaced by control of the production processes and an integrated approach to hazards throughout the production chain. This, in turn, has resulted in a new division of responsibilities among the producers (farmers), the manufacturers and the administration; namely, Veterinary Services.

The areas in which veterinarians are involved have gradually been extended from animal production to all levels of the food production chain. Animal health interventions on farms are comparable to interventions in agri-food companies. Both are, or should be, included in veterinary training and education. To meet new challenges, the current trend is for Veterinary Services to be responsible for, or coordinate, sanitary interventions from the stable to the table. Coordination between Veterinary Services and other relevant authorities is a key component of good public governance, especially for effective action and optimal management of the resources available.

Keywords

Food safety – Integrated approach – Veterinary governance – Veterinary Services.

Introduction

For a variety of reasons, food safety is becoming an increasingly important issue worldwide, with consumer expectations playing a leading role. There have been profound changes in the context of the services that control and manage food safety, largely as a result of the increase in international trade.

The trend in food safety is increasingly to consider risks and their management throughout the entire chain of production and distribution – 'from the stable to the table' –

in other words, from primary production (including animal feed, veterinary medicinal products and pesticides) to the final consumer.

Veterinary Services play a key role in the prevention and management of contagious animal diseases, zoonoses and foodborne zoonotic hazards, even when animals do not present clinical signs. In many countries, in parallel with their primary position on the farm, Veterinary Services (in the form of private veterinarians) have diversified their professional activities by taking up positions at various links in the production chain.

This article reviews the development of our understanding of foodborne hazards, the tools and key players involved in their control, and the position of Veterinary Services and partnering authorities in the hazard control process. It is mainly based on experiences in the European Union (EU).

The context: from the stable to the table

Changes in knowledge and perceptions

Perceptions of the extent and prevalence of food safety hazards are constantly changing: some hazards that used to be major concerns have declined (through control or changing situations) while others are emerging or increasing. Advances in knowledge and better analytical tests have helped to identify hazards that were previously unknown or not clearly recognised as such.

The identification of zoonotic hazards in animals that are themselves in good health has led to a change in the very notion of zoonosis. Such hazards include microbial agents, including: *Salmonella* Enteritidis, *Campylobacter jejuni*, enterotoxigenic *Escherichia coli*, *Clostridium perfringens*, *Yersinia enterocolitica* and *Listeria monocytogenes*; and parasitic diseases, such as trichinellosis, cysticercosis and hydatidosis/echinococcosis (3).

Requirements for the control of physico-chemical contaminants have grown due to a variety of factors: the use of xenobiotics (veterinary drugs, growth promoters), environmental pollution (pesticides, heavy metals, dioxin, marine biotoxins, etc.), improved detection methods, and a better understanding of their impact on consumer health. Yet, only prevention in the early stages of the production chain can stop the contamination of foodstuffs.

Changes in farm practices, the processing and storage of foodstuffs, food preservation methods and consumer habits have increased the interactions between the various segments in the production chain.

The cycle of contamination between animals, animal feed, the environment and humans is becoming increasingly well understood, both for pathogens and for physico-chemical contaminants. As a result, the need for integrated hazard control throughout the production chain has gradually come to be recognised by scientists and risk managers.

Some sanitary measures are specific to a given contaminant (action to be taken at the source of contamination) or pathogen (e.g. in the case of bovine spongiform encephalopathy [BSE], the withdrawal of specified risk

material). Conversely, for many germs, control is achieved mainly through general hygiene measures. A global sanitary approach, in a firm or production chain, can thus prevent multiple hazards, identified or otherwise.

Changes in the organisation of 'production to consumption'

Traditional production systems, which distributed their products on a local or regional scale, have evolved, as a result of the economic changes that took place during the latter half of the 20th Century, to become complex systems. We now distinguish between the stages of production, processing, distribution and consumption. Each of these has undergone profound changes:

- animal production chains have gradually become longer and more complex (fragmentation into separate but interdependent levels of processing)
- marketing has seen the advent of mass marketing, with its centralised buying offices, which represents a new economic force and a powerful concentrating and amplifying factor in the distribution of standardised products
- consumer habits have changed, due to the increase in international trade, giving consumers access to food products from all over the world
- there have also been changes in consumer lifestyle (an exponential increase in eating food prepared outside the home)
- the structure of the population has changed, with an increase in the number of medically vulnerable people (increased life expectancy, development of specialised facilities for these groups).

These changes have had the following consequences:

- a 'massification' of production, processing and distribution systems, whereby large-scale systems are interlinked and interdependent and the goods they produce are sold in many different areas, with the result that problems with the system in one country have consequences for consumers elsewhere
- a massification of consumption, through the grouping together of a large number of consumers, all using the same distribution unit or structure (in the past, tens or hundreds of people could be affected by a food safety problem, now millions of people could be affected)
- a 'globalisation' effect, in which the repercussions of an incident in a production system at a given point may be felt at points that are far away.

Media coverage, which has also increased exponentially, greatly amplifies the impact of events, influencing consumer perceptions and expectations in the face of events that are now more easily detectable, due to massification, and which could concern everybody. The media greatly influence policy-makers and risk managers, both in the private sector and in public administration.

Changes in approaches to risk management

a) In broad terms, sanitary questions used to be dealt with in a relatively independent manner for each phase of production.

In the interests of food self-sufficiency, the emphasis was placed on the earlier stages of the production chain, namely on animal health.

Foodstuffs were only checked during the primary processing phase, notably through post-mortem inspection at the abattoir.

b) Food controls were then developed, based chiefly on examining samples of the end product. Products that were found to be of inadequate quality during these inspections were withdrawn from the market.

The use of laboratory analysis enabled contaminants to be detected that were invisible to the naked eye, though there were still many limitations; in the methods used, the cost, the representativeness of the sample and the delay.

c) Trying to meet the requirements arising from the massification and globalisation of production and consumption with this traditional approach would have meant multiplying the number of controls and analyses, at a cost out of all proportion to the value of the products. In the absence of any link between the defective product and its history, other potentially involved products could not be recalled, nor could a recurrence of the problem in subsequent batches be prevented. Such an approach offered no scope to take action against undetectable contamination.

Furthermore, due to the increase in the overall sanitary quality of production systems, the frequency of the defects being looked for is increasingly low. As a result, the proportion of results that are false positive (i.e. unduly unfavourable) becomes far too high (statistically, the predictive value of a positive result is low when prevalence is low). At the same time, the notion of quality is evolving: quality can no longer be considered as simply an absence of defect. A mere compilation of favourable results, indicating an absence of detection, is no longer a truly satisfactory way of guaranteeing the quality of products.

The question then arises of transforming an 'absence of information' (no defect detected) into a positive value. This

would have the effect of increasing confidence in products produced under controlled conditions (to prevent any risk of defect), rather than in products that merely state 'no defect detected', without any information about production conditions.

The need to develop preventive measures, so that the sanitary quality of all foodstuffs produced can be controlled, has gradually been recognised, as in other fields of activity. The systems have evolved towards a global procedure for controlling food safety hazards at each stage of production.

d) The preventive management of hazards by controlling production processes, notably using the hazard analysis critical control point (HACCP) method, was first developed in agri-food firms. It then came into more general use at earlier stages of the production chain, notably at the abattoir and (according to current trends) on the farm.

e) Whereas HACCP-based approaches chiefly concern industry operators, risk analysis has established itself as a tool for public-sector managers to determine priorities for action. Qualitative and especially quantitative risk assessment is a developing science, notably in the microbiological field. The food safety crises of recent years have continued to raise the issue of the separation between risk assessment and risk management tasks, whatever the response provided so far by various countries.

f) The precautionary principle, the subject of numerous legal debates, is increasingly influencing the choices of decision-makers. It involves taking actions to manage risk in a climate of scientific uncertainty, while respecting the principles of proportionality and consistency.

g) With the concept of food safety objectives, food safety is approached in terms of the level of protection being sought at the time of consumption. Performance criteria are defined, principally by the administration and by international organisations, and implemented by food animal production operators (3).

h) Lastly, mention should be made of the increasing concerns over animal welfare and their gradual incorporation into the overall approach to food safety in the various sectors.

The various changes outlined in points a) to h) have had the effect of bringing the two sectors of the Veterinary Services closer together. In previous times, the animal health sector and the food hygiene sector were traditionally separate in terms of staffing, culture, practices and even their professional strategy. Animal health has taken on board the principles of the integrated approach in the food safety area, while food hygiene now takes into account statistical notions on the quality of tests and their results (i.e. that these results depend upon how well the tests are implemented and on sampling techniques), as well as epidemiological methods

for identifying risk factors. In the field, the continuity of the production chain, from the stable to the table, means that those working in both these sectors are increasingly being required to share their concerns, their data, and their methods of investigation.

Tools and division of responsibilities

Changes in approaches and concepts have been matched, to a certain extent, by changes in the tools used and in the bodies involved.

The move to a culture of integrated prevention implies, in particular:

- measures to ensure the traceability of animals and products throughout the production chain, without any breaks
- a new division of responsibilities among the various players
- an administration that holds all the information, by means of a harmonised control policy
- an administration with the capacity to extract information from throughout the entire chain.

The need for traceability

Confidence in the quality of products, which relies on the accreditation of production systems, will only be valid if the following conditions are met:

- the implementation of a surveillance system capable of detecting any incidents that affect the continuity of quality
- this system must be capable of identifying the defect in the production system that caused the incident, whatever the step in the production chain
- the capacity to act swiftly to withdraw unsatisfactory products (and only those) from the distribution chain.

Traceability is the ability to identify and track the history, use or location of a given item, by means of identified records. It is an essential tool in integrated approaches to managing food safety risks. Downstream (i.e. looking forwards), it allows potentially defective products to be recalled and upstream (looking back), the source of the problem can be traced and remedied.

For live animals, identification can serve many goals besides food safety, such as: control of epizootics, genetic improvement, and subsidies allocated per head of cattle (notably within the framework of the EU Common

Agricultural Policy). This is why the administration is usually responsible for organising animal identification and monitoring animal movements (although it may delegate certain activities to professional organisations).

At the processing level, industry operators are responsible for traceability (tracing forwards to identify batches already produced, or tracing back to the suppliers). The administration verifies its suitability for the goals that have been set and its effectiveness, within the framework of a second level of controls.

A new sharing of responsibilities

The integrated approach to animal health risks in the food chain has led to a redefinition of responsibilities between professionals and the authorities.

Under the traditional approach, responsibility for the sanitary quality of products lies totally with the official services, which control the end product, and may also control production conditions.

At an intermediate level, industry operators are legally responsible for the quality of the products they place on the market, while the first level of control is still being performed by the official services.

However, the changes now taking place are resulting in a sharing of responsibilities. Industry operators are responsible for the quality of the products they place on the market and must implement preventive measures, based principally on the HACCP method. The public authorities exercise a second level of control, by verifying the measures taken by industry.

Whatever the system in force, the administration (public Veterinary Services) assumes overall and ultimate responsibility with regard to the consumer and for international trade (certification). It therefore needs an overall vision of all the systems, sectors and their interactions, and must be organised accordingly.

The role of the operators

Countries are now having to redefine the responsibilities of producers and the types of partnerships that must be established with them.

Livestock producers

Livestock producers are the first sentinels on the farm. They must have sufficient training to be able to detect pathological problems in animals, especially epizootic diseases, and also, in the context of integrated management of food safety, be capable of applying measures that have no visible impact on the live animal (control of drug residues, avian salmonellosis, etc.). Training can best be provided

by producers' organisations, with the technical support of the public animal health services or private veterinarians accredited by the administration.

In addition, an adequate veterinary presence on the farm is a key element in a surveillance network and an integrated approach.

The abattoir

The abattoir has always been, and remains, the ideal place for epidemiological surveillance of animal diseases, including zoonoses. All farm animals pass through the abattoir, thus allowing a link between inspection of the live animal (ante mortem) and inspection of the carcass (post mortem). As the first stage in processing, it is here that carcasses and other animal products are systematically inspected by the Veterinary Services, and samples are taken for analysis (for BSE, residues, etc.).

In an integrated approach to food safety, some inspection duties may be delegated to industry professionals, notably in soil-free production systems. This delegation process remains strictly supervised by the authorities, whether directly or by accredited agents.

Veterinary Services must be present at the abattoir, the first stage in processing, where they carry out pre-slaughter and post-slaughter inspections.

Other agro-industries

Industry managers must have the necessary competencies to apply HACCP principles. The authorities provide a second level of controls; the methodology for these controls is still evolving.

The key roles of veterinarians and Veterinary Services

According to the definition of the World Organisation for Animal Health (OIE), Veterinary Services include all the public and private players who contribute to the system's overall effectiveness, under the control of the Veterinary Authority (10). Here, the author concentrates primarily on the Veterinary Authority and the public services that come under its direct control and their relations with other relevant authorities.

Veterinary competencies

Veterinary medicine is characterised by three specific aspects, as described here after.

i) The unit of veterinary care, at least as far as livestock are concerned, is more often the herd than the individual animal, which means combining therapy (i.e. correction of the defect in sick animals) and prevention (for the other animals in the herd). In the case of transmissible diseases, this collective approach to pathological occurrences includes the other farms within the same region, for which a specific tool is required; namely, epidemiology.

ii) The economic limits on the actions of the veterinarian are dictated by the financial resources of the owner. In the context of monitoring herd management, this means optimising the profitability of animal production units, mindful at all times of the cost-effectiveness of each action.

iii) Veterinarians must at all times weigh up the interests of the private individual (i.e. the owner) with the interests of the community, endeavouring to reconcile them whenever possible. Ultimately, however, priority will be given to the interests of the community. In most cases, this is backed up by regulation.

In the 19th Century, the initial remit of veterinarians was extended to include animal health inspections of slaughtered animals. With their knowledge of diseases in live animals, veterinarians were quite naturally called upon to detect signs in carcasses and to evaluate which parts of the animal were fit for consumption. Thereafter, this competence was extended to include the hygiene of food products of animal origin and, in the course of time, upstream to agricultural inputs and downstream to the different stages of processing, and even distribution.

The corresponding disciplines are now taught in veterinary universities, or at least in those that comply with international quality standards. They are a logical extension of the fundamental and clinical disciplines and together form a coherent unit.

It should be noted that there is a parallel between veterinary intervention in farm animal pathology and risk management procedures in agri-food companies (see Table I). Procedures such as the HACCP system are based on a similar approach to those of diagnosis and therapeutic decision-making.

The integrated management of food safety risks is, in many ways, similar to the management of animal health.

Lastly, Veterinary Services and veterinarians' experience of working within a regulatory context for notifiable diseases means that they are favourably disposed to applying standards that provide a consistent framework for preventing and controlling food safety hazards, thereby strengthening the role of the veterinarian in consumer protection.

Table I
Comparison of veterinary actions in livestock production and in agri-food companies (3)

Field of activity	Livestock pathology	Agri-food industry
Pathology	Pathology of individual animals Preventive approach at herd level Clinical approach	Microbiology Hazard analysis critical control point (HACCP) approach
Economics	Action weighted according to the value of the animal Profitability of the production unit	Profitability of the firm
Arbitration between the interests of the individual and those of the community	Community interests take precedence over the interests of the individual owner (transmissible diseases)	Protection of consumer health takes precedence over the financial interests of the firm
Overall approach	Integrated animal health approach	Integrated approach to preventing food safety hazards

Veterinary Services

Historically, Veterinary Services were set up to control animal diseases at the farm level. Their field of intervention was then quite logically extended to include the abattoir, with a dual responsibility: on the one hand to supplement their information on animal health (lesions) – i.e. as part of the surveillance network – and, on the other hand, to evaluate the wholesomeness of meat for the consumer. Abattoir inspections gradually came to be aimed at ensuring food quality in the latter stages of production.

Following on from livestock production and the abattoir, Veterinary Services have often been assigned the task of animal health control of animal products at different stages of processing, and even distribution. In some countries, they perform the majority of controls right up to the final consumer. In other countries, responsibilities are shared with one or more other services, this being particularly the case in the later stages of the food chain, notably distribution. These other services are competent to control the end product and general hygiene conditions in establishments.

With food safety increasingly integrating interactions between the different stages of the chain, the logical trend would be for a single structure to be made responsible for official controls throughout the production chain; at the very least from the farm up to the final processing of the products. As an absolute minimum, there must be organised and effective coordination between the different public structures.

The Veterinary Services are present and have a legitimate role at the farm level, either directly or through the intermediary of specially accredited veterinary practitioners. In addition to carrying out animal health and protection missions, they control the measures needed to ensure the subsequent safety of food products derived from these animals.

Furthermore, when the organisation of public services relies on a single structure to ensure controls from the stable to the table, the Veterinary Services, however they are organised, are the legitimate solution. Conversely, their competencies grant them a strategic role in coordinating all the other departments that are involved in control.

Veterinary Services also have an important role in international trade, providing relevant guarantees to importing countries by signing International Veterinary Certificates, both for animal health and animal food products in most countries of the world.

In addition, they play a key role in protecting the national territory and population, controlling imported animals and products.

In general, all countries endeavour to ensure a continuum in the chain of controls, if only by setting up coordinating structures between the relevant services. The Veterinary Services play a leading role and are generally assigned duties, either alone or in partnership, throughout the system. The overall effectiveness of such a system is variable and depends on many different parameters, but a comparison between the estimated global performance of control systems and the different organisational systems tends to confirm that the leading role played by the Veterinary Services, whatever their type of structure, is highly conducive to its success (1).

International standards

A brief overview of international standards is provided below. The issue is dealt with in full in other papers in this volume (5, 6, 7, 8).

Standardisation is an indispensable tool allowing the adoption of the most cost-effective, harmonised procedures. It is a guarantee that the certification of exported products

is carried out using internationally agreed methods, thereby reassuring customers.

Two bodies are competent to issue international standards in the field of animal health and animal products: the OIE and the Codex Alimentarius Commission (CAC). Since 1995, when the Agreement on the Application of Sanitary and Phytosanitary Measures (the 'SPS Agreement') came into effect (11), their standards have been the reference standards for the World Trade Organization (WTO) for international trade. The SPS Agreement specifically recognises OIE standards on animal health and zoonoses and Codex standards on food safety.

The OIE places Veterinary Services at the centre of its interests, and considers that the application of its standards depends on the quality of these Services. Chapters 3.1. and 3.2. of the OIE *Terrestrial Animal Health Code* are devoted to the quality and evaluation of Veterinary Services (10). The OIE Tool for the Evaluation of Performance of Veterinary Services (PVS Tool) (9) was designed to evaluate the compliance of a country's Veterinary Services with these international standards for the quality of Veterinary Services.

The Codex Alimentarius Commission, in developing its standards and guidelines, attaches growing importance to risk modelling throughout the food chain, thus taking a 'production to consumption' approach to food safety. Unlike the OIE, the CAC does not usually cite any particular professional group in its standards.

In line with an integrated approach, the CAC and OIE have agreed on strategies and procedures that will enable them to coordinate and integrate their activities at all stages of the food chain; in particular, when developing standards.

Coordination with other services

Whatever the specified duties of a country's Veterinary Services, a good working relationship between these Veterinary Services and partner authorities is crucial for taking effective action.

In many countries, food processing, storage and distribution are entrusted to either the Ministry of Public Health or the Ministry of Consumer Affairs, or shared between the Veterinary Services and one or other of these Ministries (1, 4). The Ministry of Health and the Ministry of Consumer Affairs are, therefore, the first bodies with which the Veterinary Services are required to collaborate, in such areas as:

- animal and foodborne zoonoses (inquiries and surveys; prevention)

- food safety (including veterinary drug residues and environmental pollutants)
- laboratories and testing capabilities, etc.

The broader the areas of responsibility entrusted to the Veterinary Services, the more numerous their technical interactions with other authorities who are responsible for: veterinary drugs and products; wildlife, both captive (zoos, circuses) and free-roaming; hunting; fisheries and aquaculture; environmental protection; customs and immigration; plant health and protection (feed); agriculture, livestock, agricultural development, etc.

Moreover, irrespective of the technical areas covered by Veterinary Services, all their primary activities are activities of the state (design and implementation of regulations; inspection and control; export certification; animal health checks at points of entry; control of contagious disease outbreaks, etc.) and this leads them to interact with other relevant authorities in the administrative and legal fields, such as those Ministries in charge of: the economy and finance; foreign affairs; justice; the interior, police; municipalities, local authorities; religious affairs; national defence; education and research, among others.

Specific mention should be made of cooperation and communication between public Veterinary Services and private veterinary practitioners – as the latter play a core role in the efficiency of the animal health network in the field. Indeed, these veterinarians are included in the OIE definition of Veterinary Services when it comes to evaluating the overall efficiency of these Services. Whether private practitioners are formally linked to the public Veterinary Services (by mandate or contract) or not, attention should be paid to this network of veterinary professionals.

In the same vein, veterinarians and Veterinary Services must maintain close cooperation with other professional groups involved in ensuring food safety throughout the food chain; for example: analysts, epidemiologists, food technologists, human and environmental health professionals, microbiologists and toxicologists – whatever organisation or body these professionals belong to.

Coordination is particularly important for ensuring a rapid and effective response during an emergency, such as the outbreak of a contagious animal disease or foodborne disease (e.g. setting up protection zones around farms, recalling certain products). Coordination is also needed to provide an optimum service to users on a daily basis. Administrative duplications, double checks and rivalries between authorities waste time and impose unnecessary costs on those concerned (for example, livestock producers, food manufacturers, importers, exporters, etc.). It is also important to optimise all available resources, at the very

least by avoiding the duplication of activities but also by developing synergies (efficiency) (2).

Effective coordination between public bodies needs a framework of governance: including, in particular:

- a clear national strategy in the field of animal health and veterinary public health
- clearly defined responsibilities; services endowed with the necessary authority; an appropriate legislative framework
- fairly allocated resources, distributed in line with their responsibilities, to avoid any sense of injustice or an implicit hierarchy between authorities
- authorities that are focused on customer service.

In the absence of these elements, although working on coordination will help to improve day-to-day operations, it will be more difficult and tenuous.

Effective coordination mobilises methods and tools:

- a clear political will and the strong involvement of management
- regular, open and transparent consultation
- a constant concern to optimise resources
- structured and formalised agreements
- specific actions conducted jointly to sustain formal agreements.

Organised coordination is a key component of good governance of veterinary public policy:

- it optimises the use of available resources (human and budgetary)
- it ensures consistency between the programmes conducted by public authorities
- it avoids duplication and overlap, as well as gaps or even paralysis
- it conveys a consistent picture of government action to users, including livestock producers and economic stakeholders; it reduces the chances of omission, fraud or corruption
- it provides a versatile, responsive framework that can, if necessary, be adapted quickly to changes in the national or global context.

That efficient coordination is crucial can be seen from the outcomes of poor coordination: a lack of transparency or corruption: government action can be completely paralysed, especially in an emergency; stakeholders learn to use loopholes; public authorities are discredited, etc.

Coordination between authorities in the veterinary sphere is much more than the formalisation of good professional practice: it is a key component of good public governance.

Conclusion

Veterinary Services are the key players in the domains of animal health and animal food safety and thus have a major role in responding to increasing social demands in these areas.

Their central role has been strengthened by the development of an integrated approach to food safety throughout the whole of the food chain, from farm to fork, during the last few decades. Since they are always present at the animal production level to provide health guarantees, they are crucial players in the integrated approach. Their training and the framework within which they operate gives them full legitimacy.

However countries share the responsibilities for ensuring the safety of the whole food chain, Veterinary Services must assert their position as leader or principal coordinator, especially if this has not been made clear in the administrative organisation.



La surveillance de la santé animale et de la sécurité sanitaire des aliments : le rôle des Services vétérinaires et leur coordination avec d'autres Services

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Résumé

Les contrôles dans le domaine de la santé animale et de la sécurité sanitaire des aliments ont connu de profonds changements et relèvent désormais d'une approche intégrée, « de l'étable à la table ». Les risques eux-mêmes ont évolué, du fait, principalement, de changements dans les pratiques ; ces changements, conjugués avec le développement des connaissances et les nouvelles exigences des consommateurs, ont conduit à une conception plus globale des chaînes de production.

En ce qui concerne les contrôles officiels, les contrôles ciblés sur le produit final ont progressivement été remplacés par le contrôle des processus de production et une approche intégrée des dangers sur l'ensemble de la chaîne de production. Cette évolution s'est traduite par une nouvelle répartition des responsabilités entre les producteurs (éleveurs), l'industrie de transformation et l'administration, dans le cas présent les Services vétérinaires.

Le champ d'intervention des vétérinaires s'est progressivement élargi de l'animal vivant à toutes les étapes de la chaîne de production alimentaire. Les interventions de santé animale en élevage relèvent de la même approche que les interventions sanitaires dans les industries agroalimentaires. Ces deux types d'intervention sont enseignés - ou devraient être enseignés - dans la formation initiale et continue des vétérinaires. Pour répondre aux nouveaux défis de la société, la tendance actuelle est de confier aux Services vétérinaires la responsabilité de l'exécution ou de la coordination des interventions sanitaires « de l'étable à la table ». La coordination entre les Services vétérinaires et les autres autorités concernées est une composante fondamentale de la bonne gouvernance publique, en particulier pour une action efficace et une gestion optimale des ressources disponibles.

Mots-clés

Approche intégrée – Gouvernance vétérinaire – Sécurité sanitaire des aliments – Services vétérinaires.



Función de los Servicios Veterinarios en la vigilancia de la sanidad animal y de la inocuidad de los alimentos y coordinación con otros servicios

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Resumen

El control de las enfermedades animales y de la inocuidad de los alimentos ha experimentado profundos cambios, y ahora se aborda desde una óptica

que contempla el proceso global que va 'desde el establo hasta el plato del consumidor'. Los propios riesgos también han evolucionado, sobre todo a medida que se iban transformando los métodos de trabajo, lo cual, sumado a los mayores conocimientos y a la evolución de la demanda de los consumidores, ha conducido a una concepción más integrada de las cadenas de producción.

En materia de controles oficiales, el control centrado específicamente en el producto alimentario final ha ido cediendo paso al control de los procesos de producción y a un trabajo global sobre todos los peligros a lo largo de la cadena de producción. Ello, a su vez, se ha traducido en una nueva división de responsabilidades entre los productores (granjeros), los fabricantes y la administración, esto es, los Servicios Veterinarios.

Paulatinamente, los ámbitos en que intervienen los veterinarios se han ido extendiendo de la producción animal a todos los eslabones de la cadena de producción alimentaria. Las intervenciones zoonosológicas en las explotaciones son comparables a las que tienen lugar en las empresas agroalimentarias. Ambos tipos de actuación están o deberían estar incluidas en la enseñanza y la formación veterinarias. Actualmente, para responder a las nuevas exigencias del gran público, se tiende a encomendar a los Servicios Veterinarios que asuman, o coordinen, todas las intervenciones zoonosológicas, 'desde el establo hasta el plato'. La coordinación entre los Servicios Veterinarios y las demás autoridades competentes es un componente básico del buen gobierno, sobre todo para trabajar con eficacia y hacer un uso idóneo de los recursos disponibles.

Palabras clave

Buen gobierno veterinario – Inocuidad de los alimentos – Planteamiento integrado – Servicios Veterinarios.



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