

## SECTION 6.

# VETERINARY PUBLIC HEALTH

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### CHAPTER 6.1.

## THE ROLE OF THE VETERINARY SERVICES IN FOOD SAFETY

#### Article 6.1.1.

##### **Purpose**

The purpose of this chapter is to provide guidance to Member Countries in regard to the role and responsibilities of the *Veterinary Services* in food safety, to assist them in meeting the food safety objectives laid down in national legislations and the requirements of *importing countries*.

#### Article 6.1.2.

##### **Background**

Historically, the *Veterinary Services* were set up to control livestock *diseases* at the farm level. There was an emphasis on prevention and control of the major epizootic *diseases* of livestock and of *diseases* that could affect man (zoonotic *diseases*). As countries begin to bring the serious *diseases* under control, the scope of official animal health services normally increases to address production *diseases* of livestock, where control leads to more efficient production and/or better quality animal products.

The role of the *Veterinary Services* has traditionally extended from the farm to the *slaughterhouse*, where *veterinarians* have a dual responsibility – epidemiological *surveillance* of animal *diseases* and ensuring the safety and suitability of *meat*. The education and training of *veterinarians*, which includes both animal health (including *zoonoses*) and food hygiene components, makes them uniquely equipped to play a central role in ensuring food safety, especially the safety of foods of animal origin. As described below, in addition to *veterinarians*, several other professional groups are involved in supporting integrated food safety approaches throughout the food chain. In many countries the role of the *Veterinary Services* has been extended to include subsequent stages of the food chain in the “farm to fork” continuum.

#### Article 6.1.3.

##### **Approaches to food safety**

##### **1. The concept of the food production continuum**

Food safety and quality are best assured by an integrated, multidisciplinary approach, considering the whole of the food chain. Eliminating or controlling food hazards at source, i.e. a preventive approach, is more effective in reducing or eliminating the risk of unwanted health effects than relying on control of the final product, traditionally applied via a final ‘quality check’ approach. Approaches to food safety have evolved in recent decades, from traditional controls based on good practices (Good Agricultural Practice, Good Hygienic Practice, etc.), via more targeted food safety systems based on hazard analysis and critical control points (HACCP) to risk-based approaches using food safety risk analysis.

## 2. Risk-based management systems

The development of risk-based systems has been heavily influenced by the World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures ("SPS Agreement"). This Agreement stipulates that signatories shall ensure that their sanitary and phytosanitary measures are based on an assessment of the risks to human, animal or plant life or health, taking into account risk assessment techniques developed by relevant international organizations. Risk assessment, the scientific component of risk analysis, should be functionally separated from risk management to avoid interference from economic, political or other interests. The SPS Agreement specifically recognises as the international benchmarks the standards developed by the OIE for animal health and *zoonoses* and by the Codex Alimentarius Commission for food safety. In recent decades there has also been a trend towards a redefinition of responsibilities. The traditional approach, whereby food operators were primarily held responsible for food quality while regulatory agencies were charged with assuring food safety, has been replaced by more sophisticated systems that give food operators primary responsibility for both the quality and the safety of the foods they place on the market. The role of the supervisory authorities is to analyse scientific information as a basis to develop appropriate food safety standards (both processing and end product standards) and verification inspections to ensure that the control systems used by food operators are appropriate, validated, effective and operated in such a way that the standards are met. In the event of non-compliance, regulatory agencies are responsible to ensure that appropriate corrective actions are taken and sanctions are applied.

The *Veterinary Services* play an essential role in the application of the risk analysis process and the implementation of risk-based recommendations for regulatory systems, including the extent and nature of veterinary involvement in food safety activities throughout the food chain, as outlined above. Each country should establish its health protection objectives, for animal health and public health, through consultation with stakeholders (especially livestock producers, processors and consumers) in accordance with the social, economic, cultural, religious and political contexts of the country. These objectives should be put into effect through national legislation and policies and steps taken to raise awareness of them both within the country and to trading partners.

## 3. Functions of Veterinary Services

The *Veterinary Services* contribute to the achievement of these objectives through the direct performance of some veterinary tasks and through the auditing of animal and public health activities conducted by other government agencies, private sector *veterinarians* and other stakeholders. In addition to *veterinarians*, several other professional groups are involved in ensuring food safety throughout the food chain, including analysts, epidemiologists, food technologists, human and environmental health professionals, microbiologists and toxicologists. Irrespective of the roles assigned to the different professional groups and stakeholders by the administrative system in the country, close cooperation and effective communication between all involved is imperative to achieve the best results from the combined resources. Where veterinary or other professional tasks are delegated to individuals or enterprises outside the *Veterinary Authority*, clear information on regulatory requirements and a system of checks should be established to monitor and verify performance of the delegated activities. The *Veterinary Authority* retains the final responsibility for satisfactory performance of delegated activities.

## 4. At the farm level

Through their presence on farms and appropriate collaboration with farmers, the *Veterinary Services* play a key role in ensuring that *animals* are kept under hygienic conditions and in the early detection, *surveillance* and treatment of animal *diseases*, including conditions of public health significance. The *Veterinary Services* may also provide livestock producers with information, advice and training on how to avoid, eliminate or control food safety hazards (e.g. drug and pesticide residues, mycotoxins and environmental contaminants) in primary production, including through animal feed. Producers' organisations, particularly those with veterinary advisors, are in a good position to provide awareness and training as they are regularly in contact with farmers and are well placed to understand their priorities. Technical support from the *Veterinary Services* is important and both private *veterinarians* and employees of the *Veterinary Authority* can assist. The *Veterinary Services* play a central role in ensuring the responsible and prudent use of biological products and veterinary drugs, including antimicrobials, in animal husbandry. This helps to minimise the risk of developing antimicrobial resistance and unsafe levels of veterinary drug residues in foods of animal origin. Chapters 6.7. to 6.10. contain recommendations on the use of antimicrobials.

## 5. Meat inspection

*Slaughterhouse* inspection of live *animals* (ante-mortem) and their carcasses (post-mortem) plays a key role in both the *surveillance* network for animal *diseases* and *zoonoses* and ensuring the safety and suitability of *meat* and by-products for their intended uses. Control and/or reduction of biological hazards of animal and public health importance by ante- and post-mortem *meat* inspection is a core responsibility of the *Veterinary Services* and they should have primary responsibility for the development of relevant inspection programmes.

Wherever practicable, inspection procedures should be risk-based. Management systems should reflect international standards and address the significant hazards to both human and animal health in the livestock being slaughtered. The Codex Alimentarius Code of Hygienic Practice for Meat (CHPM) constitutes the primary international standard for *meat* hygiene and incorporates a risk-based approach to application of sanitary measures throughout the *meat* production chain. Chapter 6.2. contains recommendations for the control of biological hazards of animal health and public health importance through ante- and post-mortem *meat* inspection, which complement the CHPM.

Traditionally, the primary focus of the *Terrestrial Code* was on global animal health protection and transparency. Under its current mandate, the OIE also addresses animal production food safety risks. The *Terrestrial Code* includes several standards and recommendations aimed at protecting public health (such as Chapter 6.2. on the control of biological hazards of animal health and public health importance through ante- and post-mortem meat inspection) and work is underway developing new standards to prevent the contamination of animal products by *Salmonella* spp. and *Campylobacter* spp. The OIE and Codex collaborate closely in the development of standards to ensure seamless coverage of the entire food production continuum. The recommendations of the OIE and the Codex Alimentarius Commission on the production and safety of animal *commodities* should be read in conjunction.

The *Veterinary Authority* should provide for flexibility in the delivery of the *meat* inspection service. Countries may adopt different administrative models, involving degrees of delegation to officially recognised competent bodies operating under the supervision and control of the *Veterinary Authority*. If personnel from the private sector are used to carry out ante- and post-mortem inspection activities under the overall supervision and responsibility of the *Veterinary Authority*, the *Veterinary Authority* should specify the competency requirements for all such persons and verify their performance. To ensure the effective implementation of ante- and post-mortem inspection procedures, the *Veterinary Authority* should have in place systems for the monitoring of these procedures and the exchange of information gained. *Animal identification* and *animal traceability* systems should be integrated in order to be able to trace slaughtered *animals* back to their place of origin, and products derived from them forward in the *meat* production chain.

## 6. Certification of animal products for international trade

Another important role of the *Veterinary Services* is to ensure that health certification for international trade complies with animal health and food safety standards. Certification in relation to animal *diseases*, including *zoonoses*, and *meat* hygiene should be the responsibility of the *Veterinary Authority*. Certification may be provided by other professions (a sanitary certificate) in connection with food processing and hygiene (e.g. pasteurisation of dairy products) and conformance with product quality standards.

## 7. The roles of the Veterinary Services

Most reported *outbreaks* of food-borne *disease* are due to contamination of foods with zoonotic agents, often during primary production. The *Veterinary Services* play a key role in the investigation of such *outbreaks* all the way back to the farm and in formulating and implementing remedial measures once the source of the *outbreak* has been identified. This work should be carried out in close collaboration with human and environmental health professionals, analysts, epidemiologists, food producers, processors and traders and others involved.

In addition to the roles mentioned above, *veterinarians* are well equipped to assume important roles in ensuring food safety in other parts of the food chain, for example through the application of HACCP-based controls and other quality assurance systems during food processing and distribution. The *Veterinary Services* also play an important role in raising the awareness of food producers, processors and other stakeholders of the measures required to assure food safety.

8. Optimising the contribution of the Veterinary Services to food safety

In order for *Veterinary Services* to make the best possible contribution to food safety, it is important that the education and training of *veterinarians* in the roles outlined in this chapter meets high standards and that there are national programmes for ongoing and comprehensive professional development. The *Veterinary Services* should comply with the OIE fundamental principles of quality given in Chapter 3.1. Recommendations for the evaluation of *Veterinary Services* are provided in Chapter 3.2. and in the OIE *Tool for the Evaluation of Performance of Veterinary Services*.

There should be a clear and well documented assignment of responsibilities and chain of command within the *Veterinary Services*. The national *Competent Authority* should provide an appropriate institutional environment to allow the *Veterinary Services* to develop and implement the necessary policies and standards and adequate resources for them to carry out their tasks in a sustainable manner. In developing and implementing policies and programmes for food safety, the *Veterinary Authority* should collaborate with other responsible agencies to ensure that food safety risks are addressed in a coordinated manner.

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