CHAPTER 6.1.

THE ROLE OF THE VETERINARY SERVICES
IN FOOD SAFETY SYSTEMS

Article 6.1.1.

Introduction

Food safety systems are now considerably different from those of earlier years and this provides a wider role for the Veterinary Services. The characteristics of these systems are global, regional, national and local in reach, especially in relation to the globalisation of the food supply, which requires a greater level of engagement and collaboration, in line with the One Health approach. There is a particular emphasis on risk-based food safety systems where implementation is a responsibility shared with a wide range of actors along with assurance of non-food safety requirements that are of high importance to consumers.

The education and training of veterinarians, which includes both animal health (including zoonoses) and food safety components, makes them uniquely equipped to play a central role in ensuring food safety, especially the safety of foods of animal origin. In addition to veterinarians, other professionals are involved in ensuring an integrated food safety system throughout the food chain.

Article 6.1.2.

Purpose and scope

The purpose of this chapter is to provide guidance to Member Countries on the role and responsibilities of the Veterinary Services in food safety systems.

This chapter should be read in conjunction with Chapters 4.1., 4.2., and relevant chapters of Sections 6 and 7.

The OIE and Codex Alimentarius Commission, through the development and implementation of standards and guidelines, contribute to improving food safety and human health by reducing risks that may arise at the farm and any subsequent stages in the food production continuum. Therefore, this chapter should be read in conjunction with the Codex Alimentarius General Principles of Food Hygiene (CAC/RCP 1-1969), Code of Hygienic Practice for Meat (CAC/RCP 58-2005), Code of Practice on Good Animal Feeding (CAC/RCP 54-2004), Guidelines for the Design and Implementation of National Regulatory Food Safety Assurance Programmes Associated with the Use of Veterinary Drugs in Food Producing Animals (CAC/GL 71-2009), and other relevant Codex texts on hygienic practices, food import and export certification systems and antimicrobial resistance.

Article 6.1.3.

Characteristics of a food safety system

1. Farm to plate approach

Food safety is best assured by an integrated, multidisciplinary approach, considering the whole food chain. Everyone in the food chain, such as food business operators, the Veterinary Services and consumers, has a responsibility to ensure that food is safe. A modern food safety system should take into account the complexity of food production and the increased globalisation of the food supply, and should be risk-based. The application of traceability systems and sharing of food chain information will enhance the effectiveness of a food safety system. The food safety system should include consideration of potential risks associated with each component of the food chain, namely primary production, transport, processing and distribution, and integrate these throughout the food continuum. The prevention, detection, and control of foodborne hazards throughout the food chain is generally more effective in reducing or eliminating the risk of unwanted health effects than relying on controls of the final product.
2. **Risk-based food safety systems**

Risk-based food safety systems include measures based on good practices (such as Good Agricultural Practice, Good Hygienic Practice), hazard analysis and critical control points (HACCP) and risk assessment. The design and application of this risk-based approach depend on the availability of scientific information and technical resources of the Competent Authority. Monitoring and review are essential to evaluate the performance of a risk-based food safety system.

For international trade, a risk-based approach to food safety systems contributes to the determination of equivalence between trading partners.

3. **Primary responsibilities of food business operators for food safety**

Food business operators, including feed producers, farmers, processors, wholesalers, distributors, importers, exporters and retailers, have primary responsibility for ensuring the safety of their products and should be able to demonstrate that they comply with relevant food safety regulatory requirements. The food business operators have a responsibility to inform the Competent Authority of any non-compliance associated with their product and take action to manage the risk e.g. the withdrawal of the product.

4. **Responsibilities of the Competent Authority**

Each Member Country should establish its objectives for animal health and public health protection, through consultation with stakeholders (especially livestock producers, processors and consumers) in accordance with the social, economic, cultural, religious and political contexts of the country. Based on these objectives and the analysis of scientific information, the Competent Authority has the responsibility to develop national legislation and policies relevant to food safety. The Competent Authority should take steps to raise awareness of these both within the country and to trading partners.

The Competent Authority should ensure that the control systems used by food business operators are appropriate, validated, and effective, and operated in such a way that the standards are met. This should be verified through activities such as inspection and audit. In the event of non-compliance, appropriate corrective actions and sanctions should be applied.

5. **Animal and public health roles of the Veterinary Services**

At the national level the activities of the Competent Authority serve both public and animal health objectives. In the case of food safety, this duality of roles provides an opportunity for the Veterinary Services to perform complementary activities throughout the food chain in coordination with other relevant agencies. It is important that this duality of functions is recognised, and relevant public health and animal health activities are integrated.

**Article 6.1.4.**

**The role of the Veterinary Services in a food safety system**

1. **Responsibilities of the Veterinary Services**

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

In order for Veterinary Services to make the best possible contribution to food safety, it is important that the education and training of veterinarians and veterinary para-professionals meet appropriate levels of competence and that there are national programmes for ongoing professional development.

The Veterinary Services should be responsible for, or involved in, the design and implementation of national control programmes of a risk-based food safety system. Implementation includes verification, audit, assurance and certification. In the implementation of food safety systems for foods of animal origin, the Veterinary Services should retain responsibility for verification and audit and facilitate a flexible approach to operational activities.

Where food safety activities are delegated outside of the Veterinary Services, the Veterinary Services should retain responsibility for competency standards and performance of the delegated activities.
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.

In view of the competencies within the Veterinary Services, they should contribute to other food safety related activities such as investigations of foodborne disease outbreaks, food defence, disaster management, and emerging risks.

2. Activities throughout the food chain

The Veterinary Services have a significant role to play throughout the food safety system. Depending on the role and responsibilities of the Competent Authority, the responsibilities of the Veterinary Services may be limited to the first part of the food chain (from farm to slaughterhouse/abattoir and associated premises for further processing) while in other cases the Veterinary Services may be responsible for the whole food chain.

a) Primary production

Through their presence on farms and appropriate collaboration with farmers, 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 advise on animal husbandry practices, biosecurity and interventions that limit the transmission of animal diseases, including foodborne zoonoses.

Because of the importance of traceability throughout the food chain, the verification by the Veterinary Services of animal identification is an important function.

The Veterinary Services assist farmers on how to minimise chemical hazards (e.g. drug and pesticide residues, mycotoxins and environmental contaminants) in primary production, including through animal feed. Producers’ organisations, particularly those with veterinary advisers, 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 antimicrobial agents, 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.

b) Processing and distribution

The Veterinary Services have an essential role in ensuring that processing (including meat inspection) and distribution minimise foodborne risks to public health. This may be provided by supervision and verification of process control and direct involvement in operational activities such as ante-mortem and post-mortem inspection. Slaughterhouse/abattoir 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 or reduction of biological hazards of public health and animal 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 and effective implementation of relevant inspection programmes. Chapter 6.2. provides recommendations for the control of biological hazards of animal health and public health importance through ante- and post-mortem meat inspection.

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.

Veterinarians provide essential inputs in terms of scientific information, risk assessment, validation of control measures, and monitoring and review of public health outcomes, in the design and implementation of a risk-based food safety system.

Veterinarians have an important role in ensuring food safety in various parts of the food chain, for example through the application of HACCP based controls and other quality assurance systems during food processing and distribution.
c) Assurance schemes and certification of animal products for international trade

The Veterinary Services have an important role in providing public health assurance for products of animal origin. When assurance is required for animal products international trade assurance may take the form of certification of consignments. In which case, the Veterinary Services ensure that international veterinary certificates comply with animal health and food safety standards. Certification of animal products in relation to animal diseases, including foodborne zoonoses, and meat hygiene should be the responsibility of the Veterinary Services. Certification may be provided by other professionals in connection with food processing and hygiene (e.g. pasteurisation of milk products).

3. Foodborne disease outbreaks

Most reported outbreaks of foodborne disease in humans are due to contamination of foods with zoonotic agents during primary production or processing. The Veterinary Services play a key role in the investigation of such outbreaks throughout the food chain and in formulating and implementing control measures as appropriate 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.

The Veterinary Services can play a leading role in development and application of new epidemiological and diagnostic tools to better attribute outbreaks of foodborne diseases to specific animal reservoirs.

In the view of the global nature of the food trade, the Veterinary Services should work with other national agencies in reporting to international emergency foodborne disease networks such as the International Network of Food Safety Authorities (INFOSAN), and in utilising such information for preparedness.

4. Animal and public health roles of the Veterinary Services

This complementary role of the Veterinary Services is clearly illustrated in relation to inspection and monitoring at the slaughterhouse, for both animal health and public health hazards.

The Veterinary Services contribute to the development and management of coordinated surveillance and control programmes related to foodborne pathogens of public health importance, such as Salmonella and Trichinella.