



To ensure food safety of animal products, action is needed at the farm level during animal production. Many sanitary risks may be present during the pre-slaughter stage, including risks that can be reduced or avoided through disease prevention policies and good practices recommended by the OIE. Since 2002, a permanent Working Group of the OIE has been preparing science-based standards and guidelines on animal production food safety.

### FROM FARM TO FORK

In this age of globalisation, ensuring healthy, hazard-free food is one of the key issues for international organisations working in this field. To this end, the World Organisation for Animal Health (OIE), the Food and Agriculture Organization of the United Nations (FAO), the World Health Organization (WHO) and the Codex Alimentarius Commission (CAC) work closely together, each in its area of competence. Since 2002, the OIE is looking into '**animal production food safety**'. As existing international food safety standards did not always enable a link to be made between the food production phase and the food processing phase, there was clearly a need to complete the international standards in force so as to ensure food safety 'from farm to fork' through appropriate recommendations and controls.

Surveillance at all stages of animal production is principally the task of the national Veterinary Services. The Veterinary Services help to reduce risks to animal health and public health by conducting controls on-farm and, in many cases, in abattoirs where they carry out ante-mortem and post-mortem inspections, to verify the health of the animals and the wholesomeness of their products, in accordance with OIE standards. In several countries they are responsible for food safety throughout the entire food chain (farm, abattoir, transport, distribution, catering).

**The role and responsibilities of Veterinary Services in food safety are outlined in chapter 6.1. of the Terrestrial Code ([http://www.oie.int/index.php?id=169&L=0&htmfile=chapitre\\_1.6.1.htm](http://www.oie.int/index.php?id=169&L=0&htmfile=chapitre_1.6.1.htm))**

### THE OIE'S SPEARHEADING ACTIVITIES

#### Traceability

The OIE, through its Working Group on Animal Production Food Safety with representatives coming from the CAC, the FAO and WHO among others, has coordinated work on identification and traceability of live animals. It established a continuum with standards adopted by the CAC on the traceability of animal products in 2006, when the Member Countries of the OIE World Assembly of Delegates and those of the CAC decided to include formal cross-references to each other's texts in standards relating to traceability of live animals and traceability of animal products.

#### Antimicrobial resistance

Antimicrobial resistance means the full or partial resistance to antibiotics acquired by some pathogens, especially bacteria. This phenomenon can lead to serious treatment failure in humans and in animals. In 2007, the OIE published the list of Antimicrobials of Veterinary Importance adopted by all its Member Countries.

The OIE, in close collaboration with the CAC and the WHO, is seeking to develop a supervisory framework, based on suitably adapted sanitary standards, to govern the use of antimicrobials (antibiotics) in animals.

A new chapter on the principles for responsible and prudent use of antimicrobial agents in aquatic animals has been included in the 2011 edition of the Aquatic Code. These actions are aimed at curbing the development of antimicrobial resistance in pathogens that could affect the health of animals or sometimes even humans, in particular via the food chain.

## FOOD-BORNE RISKS

Biological hazards that need to be controlled to ensure the safety of food includes bacterial infections, such as *Salmonella* spp., *Escherichia coli* which produces Shiga toxins, *Listeria monocytogenes*, *Campylobacter* and *Mycobacterium tuberculosis*, and parasites, viruses or toxins present in food. Chemical hazards are primarily veterinary drug residues, and other persistent chemical or organic pollutants. There are also food safety hazards associated with wild fish products and aquaculture of finfish, crustaceans and molluscs.

### World Trade Organization (WTO):

#### Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement)

The SPS Agreement governs the way in which governments can apply national measures relating to the sanitary safety and phytosanitary of international trade.

The OIE is one of the international standard setting organisations mentioned in the SPS Agreement, alongside the Codex Alimentarius Commission (CAC) and the International Plant Protection Convention (IPPC). The Agreement indicates the OIE as the reference international organisation for animal health, including zoonoses.

### The Codex Alimentarius Commission

The Codex Alimentarius Commission was created in 1963 by the FAO and the WHO to set standards on food safety. The main purposes of this programme are to protect the health of consumers, promote fair practices in the food trade and to coordinate all the food standards work undertaken by international governmental and non-governmental organisations.

**Escherichia coli (*E. coli*):** *E. coli* is one of the most common micro-organisms present in the intestine of most mammalian species. Some strains are pathogenic for humans and trigger an infection after ingestion of contaminated food or water. Cattle and other ruminants can act as an animal reservoir for *E. coli* and be a source of contamination for humans.

**Salmonellosis:** this bacterial food-borne disease is caused by a pathogen that infects animals. It can be spread by trade in animals and uncooked food products of animal origin. In order to combat this zoonosis, its prevalence in livestock including poultry on the farm must first be reduced.

**Tuberculosis:** *Mycobacterium bovis* in cattle is a particularly virulent zoonotic agent. There has been a re-emergence of the disease in recent years, even in some developed countries. Historically, pasteurization of milk from infected animals largely contributed to controlling the spread of bovine tuberculosis among human populations.

## FOCUS ON...

### Good farming practices

Good farming practices can help to ensure better control of animal diseases, zoonoses and the sanitary safety of food at source: at farm level. Good farming practices cover animal housing, healthcare, the composition and storage conditions of feed, animal watering, etc.

The OIE and the FAO published a guide to good farming practice. It provides producers with guidelines on how to meet the growing consumer demands in terms of animal health, quality of products and a healthy agricultural environment ([http://www.oie.int/fileadmin/Home/eng/Publications\\_%26\\_Documentation/docs/pdf/Bull\\_2008-1-ENG.pdf](http://www.oie.int/fileadmin/Home/eng/Publications_%26_Documentation/docs/pdf/Bull_2008-1-ENG.pdf)).

### Animal feeding

Consumer protection also involves controlling the quality and wholesomeness of feed given to animals intended for human consumption. Animal feed quality is an important factor in improving animal health and public health worldwide.

The OIE has developed standards for terrestrial and aquatic animal feed, covering the entire production chain, from the ingredients to distribution, including processing, production and storage conditions.