Fact sheets

Food safety

To ensure food safety of products of animal origin, action is needed from production level at the farm. Many food safety risks arise at the pre-slaughter stage, and these can be reduced or prevented using 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 food safety during their production stage.

FROM FARM TO FORK

In this age of globalisation, ensuring healthy, hazard-free food is a key issue for all countries. 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 elaborates, adopts and publishes standards and guidelines on ‘animal production food safety’, with a focus on establishing linkages between the food production phase and the food processing phase, often described as a ‘from farm to fork’ approach.

The Veterinary Services help to reduce risks to animal health and public health by conducting checks on-farm and in places of transformation, such as slaughterhouses, 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, the Veterinary Services are responsible for food safety throughout the entire food chain (farm, abattoir, transport, distribution, catering).

EXAMPLES OF IMPLEMENTATION OF OIE STANDARDS TO GUARANTEE SAFETY OF FOOD

ZOOLOGICAL PARASITES

In 2010, the OIE initiated a revision of Terrestrial Code chapters on Trichinella infection and echinococcosis/hydatidosis, and developed a new chapter on porcine cysticercosis. These are, as an example, three OIE listed diseases of public health significance, for which the application of prevention and control measures at the ‘animal and farm level’ can help to prevent illness in humans. In May 2013 the revised chapters on Infection with Trichinella spp. and infection with Echinococcosis granulosus, as well as a new chapter on Infection with Echinococcosis multilocularis were adopted.

SALMONELLOSIS

Salmonellosis is a food-borne disease caused by certain bacteria of the Salmonella species, which are normally present in the intestine of animals. Human infection can occur via consumption of uncooked contaminated food. Reducing the prevalence of Salmonella species in animals and good hygienic practices in food handling can help to prevent disease in humans. The OIE has developed standards on biosecurity procedures in poultry production and the prevention, detection and control of Salmonella in poultry.

TUBERCULOSIS

Tuberculosis is a disease due to the mycobacteria Mycobacterium bovis, which causes tuberculosis in particular in cattle, but can also cause tuberculosis in humans, usually via the ingestion of milk from infected animals. The reduction of the infection in herds and the pasteurisation of milk have contributed significantly to the control of bovine tuberculosis in humans. However, M. bovis still remains a relatively common cause of tuberculosis in humans in numerous countries.
ANIMAL FEED
Food safety also involves controlling the quality and wholesomeness of animal feed. Animal feed is a critical component of the food chain that has a direct impact on animal health and also on food safety and public health. The OIE has adopted standards for terrestrial and aquatic animal feed aimed at ensuring the control of hazards of animal health and public health importance in animal feed.

TRACEABILITY
The OIE, through its Working Group on Animal Production Food Safety with representatives from the CAC, the FAO and WHO, amongst others, has coordinated work on important “cross-cutting” standards for terrestrial and aquatic animals, including those on animal identification and traceability.

ANTIMICROBIAL RESISTANCE
Misuse of antimicrobials in human and veterinary medicine can lead to reducing treatment efficacy in both humans and animals. It is crucial to preserve antimicrobial activity to protect animal health and welfare in order to ensure that animal production keeps pace with the growing global demand for high-quality protein.

The OIE has developed standards on the responsible and prudent use of antimicrobial agents in terrestrial and aquatic animals. The OIE also published a list of Antimicrobials of Veterinary importance. Both the standards and the list have been adopted by all OIE Member Countries.

FOOD-BORNE HAZARDS
Biological hazards that must be controlled to ensure food safety are varied and in particular include bacteria such as *Salmonella spp.*, *Escherichia coli*, *Listeria monocytogenes*, *Campylobacter spp.* and *Mycobacterium tuberculosis* complex. Numerous parasites, viruses and toxins are other important biological hazards. Chemical hazards include veterinary drug residues and chemical (PCP, dioxins) or environmental pollutants (heavy metals). Food safety hazards may be associated with terrestrial and aquatic animals and their products.

World Trade Organization (WTO):
Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement)
For WTO Members, the SPS Agreement provides the rules by which governments can elaborate sanitary and phytosanitary safety measures in international trade. The OIE is one of the international standard setting organisations recognised in the SPS Agreement, alongside the CAC and the International Plant Protection Convention (IPPC). The Agreement recognises the OIE as the reference international standard setting organisation for animal health, including zoonoses.

The Codex Alimentarius Commission (CAC)
The CAC, which was established in 1963 by the FAO and the WHO, which assume its guardianship, is recognised as the reference international standard setting organisation for food safety under the WTO SPS Agreement. The objectives of the CAC are to develop harmonised international food standards, guidelines and codes of practice to protect the health of the consumers and ensure fair trade practices in the food trade.

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, disease prevention, the composition and storage conditions of feed, animal watering, etc. The OIE/FAO Guide to good farming practice provides guidance to achieve desired animal health, food safety and agricultural environment sustainability (www.oie.int/fileadmin/Home/eng/Publications_%26_Documentation/docs/pnl/Bull_2008-1-ENG.pdf).