



Border Veterinary Service 2007

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The Border Veterinary Service (BVS) of the Federal Veterinary Office checks live animals and product categories to ensure that they comply with legal requirements on import, transit and export. These regulations are based on animal disease, animal welfare and food legislation.

Apart from the management position at the Federal Veterinary Office, the BVS consists of around 20 full-time or part-time border veterinarians.

In 2007, a total of 88,000 consignments were cleared by the following four customs districts:

Inspection of consignments originating from countries outside the EU (Jan – Dec. 2007):

Customs district	Live animals	Meat	Fish, seafood	Meat / fish products and preparations	Animal by-products	Total:
Basel (I)	250	5593	6346	2066	2854	17109
Schaffhausen (II)	242	1947	6322	112	412	9035
Geneva (III)	145	173	1505	73	97	1993
Lugano (IV)	3	7	2	27	18	57
Total	640	7720	14175	2278	3381	28194

Inspection of consignments originating from EU countries (Jan – March. 2007*):

Customs district	Live animals	Meat	Fish, seafood	Meat / fish products and preparations	Animal by-products	Total:
Basel (I)	1596	4830	11877	3616	4449	17109
Schaffhausen (II)	403	1976	1474	983	1919	9035
Geneva (III)	363	6464	5320	3521	342	1993
Lugano (IV)	86	2976	1276	2840	170	57
Total	2448	16246	19947	10960	6880	56481

*Between April and December 2007 inspections were carried out by the mobile border veterinary unit (see text for figures).

On 1 July 2007, the completely revised ordinance on the import, transit and export of animals and animal products (EDAV) came into force. In the context of ongoing discussion between the EU and Switzerland on harmonization in the inspection of consignments originating from countries outside Europe and the proposed dismantling of border inspections on the mutual exchange of goods, Switzerland regulations governing imports were harmonized with those of the EU. Based on the equivalence of the legal frameworks for the production and domestic inspection of animals and animal products, Switzerland stopped systematic veterinary inspections for imports from the EU on 1 July. Until discussions on a complete dismantling of mutual inspections have been completed, however, random inspections will continue to be carried out by a newly established mobile border veterinarian unit. Between April and December 2007, this unit inspected 3047 consignments for import, of which about 3.1% were rejected. Most of the rejections were due to incomplete accompanying documents, which

sere sent on in most cases. Thirty-three (about 1%) of the consignments checked showed deficiencies, which resulted either in being turned back or in being placed in storage at home.

In 2007, work also started to expand the infrastructure of border veterinary checkpoints at Zurich and Geneva airports. By mid-2008 new rooms and facilities will be available at these sites to up-to-date inspections of consignments from countries outside the EU. After the completion of ongoing discussions with the EU on an extension of the veterinary annex to the bilateral agreement, import controls should also be carried out at these places for goods and animals intended for the EU.

The precautionary measures taken in response to fowl pest were also continually adapted to the changing disease situation in 2007. The outbreak of foot-and-mouth disease in England led to a temporary import ban on biungulates and their products.

Meat and meat products are subject to inspection by the Border Veterinary Service when they are imported. This is intended to ensure that no animal disease pathogens are introduced into the country and that no goods harmful to health enter the market. The accompanying documents of all consignments are checked. In the case of consignments from the EU and Norway, a general physical inspection of the imported goods is carried out. As a rule, the border veterinarian decides there and then whether a consignment may be allowed in or not. If there is a suspicion that goods do not satisfy requirements, the Border Veterinary Service orders the necessary laboratory tests. Samples are taken not only in suspected cases, but also on a random basis as part of specific priority testing programmes, which are changed periodically.

The results obtained in tests ordered by the Border Veterinary Service and carried out in cantonal laboratories and in other external laboratories are explained in the following chapters.

1 Sanitary testing

1.1 *Testing on feed of animal origin*

No tests

1.2 *Testing for fish diseases*

Eight fish samples (live or frozen) of various species were tested for the following diseases: spring viraemia in carp (all negative), infectious haematopoietic necrosis (all negative), infectious pancreatic necrosis (2 positive) and viral haemorrhagic septicaemia (all negative).

2 Food hygiene testing

2.1 *Microbiological tests*

2.1.1 Pathogenic bacteria

2.1.1.1 *Campylobacter jejuni / coli*

Of the 80 poultry samples, 3 were positive for *Campylobacter*. The contaminated samples came from Brazil. There are currently no legally defined standards for *Campylobacter* and *Salmonella* in or on unprocessed products. In one sample, *Helicobacter pullorum* was detected.

2.1.1.2 *Salmonella spp.*

The same samples as those under 2.1.1.1. were also tested for *Salmonella*. Five poultry samples from Brazil were positive. No legal standard is currently applicable for raw meat.

2.1.1.3 *Listeria monocytogenes*

No listeria were detected in the only smoked fish sample tested.

3 Chemical testing of foods

The test programme was based on a risk assessment that was performed by the FVO in collaboration with the Federal Office of Public Health and the cantonal laboratories.

3.1 *Impurities and additives*

3.1.1 Antimicrobials

3.1.1.1 *Tetracyclines*

No tetracyclines were detected in 30 samples of crustaceans, 54 of freshwater fish, 13 of beef, 20 of horsemeat and 20 of mutton. Of 79 poultry samples tested, a tetracycline was detected in 3 (all from Brazil), but without the maximum value being exceeded.

3.1.1.2 *Sulphonamides*

The same samples as those in 3.1.1.1. were also tested for sulphonamides. A freshwater fish from Vietnam had to be rejected because the value was 3 times higher than the tolerance limit. In a further fish sample, a sulphonamide was detected below the tolerance threshold of 100 µg/kg.

3.1.1.3 *Quinolones*

The same samples as those in 3.1.1.1. were also tested for quinolones. Apart from 5 freshwater fish, all samples were free of quinolones. These fish showed traces, but they were below the permitted maximum.

3.1.1.4 *Trimethoprim*

No trimethoprim was detected in any of 20 poultry samples tested.

3.1.1.5 *Macrolides*

Traces (<maximum) of a macrolide antibiotic were detected in 2 of 20 poultry samples tested.

3.1.1.6 *Chloramphenicol*

1 eel, 17 freshwater fish and 20 poultry samples all showed no chloramphenicol residues.

3.1.1.7 *Aminoglycosides*

None of the 16 crustacean, 13 beef and 20 mutton samples tested for aminoglycosides exceeded the maximum limit. Neomycin (below the threshold value) was detected in a beef sample from Brazil.

3.1.1.8 *Penicillins*

No penicillin residues were detected in 22 poultry samples and 13 freshwater fish samples.

3.1.1.9 *Nitroimidazoles*

The same samples were also tested for nitroimidazole .

3.1.1.10 *Nitrofurans*

The use of nitrofurans is banned in Switzerland. However, a threshold value of 1 µg/kg has been defined. Thirty-three samples each of freshwater fish and crustaceans were tested for nitrofurans residues. In one prawn sample, 1.8 µg/kg furazolidone was detected. All others were negative.

The cantonal laboratories in which the tests were carried out all use the LC-MS method and determine the metabolites of furaltadone, furazolidone, nitrofurantoin and nitrofurazone.

3.1.2 Other pharmacological substances

3.1.2.1 *Malachite green*

No malachite green was detected in 54 freshwater fish (predominantly pangasius from Vietnam).

3.1.2.2 *Coccidiostatics*

Altogether 65 poultry samples were tested for coccidiostatic residues. Slight residues were found in 22 samples, but they were below the maximum permitted values.

3.1.3 Environmental contaminants

3.1.3.1 *Mercury*

Testing was concentrated on fatty fish, which as a rule have higher mercury concentrations, but in which higher maximum values are also tolerated (1.0 mg/kg instead of 0.5 mg/kg).

Seventy-nine seawater fish (mostly tuna and swordfish), 19 molluscs and 14 shellfish were tested for mercury. In 6 fatty fish values over 1 mg/kg found: Philippines (4) and Sri Lanka (2).

3.1.3.2 *Lead*

All 32 molluscs tested were below the threshold value.

3.1.3.3 *Cadmium*

Of 34 seafood samples tested, one octopus from India showed more than 5 mg/kg cadmium and consequently had to be rejected.

3.2 *Additives*

3.2.1 **Preservatives**

The highest permissible concentration for sulphites is 150 mg/kg in uncooked shellfish and 50 mg/kg in cooked shellfish. The threshold value was not exceeded in any of the 16 shellfish samples tested.

3.2.2 **Nitrite / nitrate**

Forty samples of smoked fish were tested. Nitrite may be used as nitrite pickling salt in meat products, but not in fish, shellfish or mollusc products. The use of nitrates is subject to stricter restrictions and their use is only permitted in cured and tinned products. Nitrates occur naturally in the environment, so for nitrite and nitrate a "tolerance threshold" of 20 mg/kg is applied, of which not more than 7 mg/kg may be nitrite. Again 2 fish products from Ghana had to be rejected.

3.2.3 **Polyphosphates**

One mussel sample was tested negative for polyphosphates.

3.3 *Further analyses*

3.3.1 **Species determination**

Five exotic animals were tested to establish whether they conformed to the declared animal species. There was no rejection.

3.3.2 Deep freeze storage

Thirty-three fresh meat samples (mutton, beef, horse) were tested to establish whether they had ever been frozen. One mutton consignment each from New Zealand and Australia had been frozen, although they were declared as fresh meat

3.3.3 Parameters for product freshness

One flatfish sample was tested to determine how fresh it actually was. The most significant measurable value for freshness is the TVBN (total volatile base nitrogen) content. The longer fish is stored, the more volatile nitrogen compounds occur, which are measured as TVBN. The concentration of trimethylamine (TMA) increases at the same time. It is this substance which is responsible for the unpleasant fishy smell. These two substances are not covered by any food legislation in Switzerland. The highest permissible level laid down by the EU is 300 or 350 mg/kg, there is no value stipulated for TMA. However, Norway applies a limit of 50 mg/kg. The sample tested was not rejected.

3.3.4 Tranquillizers

No traces of tranquillizers were found in 20 horsemeat samples.