REGULATION
regarding the monitoring of campylobacter in poultry and poultry meat

Article 1
Purpose and scope
The objective of this regulation is to ensure that appropriate and efficient measures are taken to detect and protect against campylobacter bacteria at all stages of production, processing and distribution of poultry meat, with a view to reducing their prevalence and the risk they pose against food safety and public health, cf. Regulation no. 1011/2011 on the control of salmonella and other specified food-borne zoonotic agents.

This regulation sets out detailed rules on the monitoring of campylobacter, cf. Regulation No 1048/2011 on the monitoring of zoonoses and zoonotic agents.

This Regulation covers monitoring of campylobacter during the primary production of poultry meat, the slaughtering of domestic fowl and the distribution of poultry meat on the market.

Article 2
Definitions
Poultry: Domestic fowl, including fowl that are not considered farmed animals but are bred as farm animals.
Flock: All poultry with the same state of health that are kept in the same housing or within the same fence, forming an epidemiological unit. In the case of poultry kept housed this includes all birds sharing the same air space.
Freezing: Treatment of produce where the temperature of foodstuffs shall be constantly kept at -18°C or lower for at least two weeks.
Heat treatment: Heat treatment where the core temperature has reached 72°C for at least 15 seconds or another treatment which the Icelandic Food and Veterinary Authority considers to be equivalent. Heat treatment is considered adequate when no campylobacter is found in 10 g after heat treatment.
Treatment: Freezing or heat treatment.
Slaughter flock: A flock or part of a flock that is slaughtered on the same day.

Article 3
Official controls
The Minister of Fisheries and Agriculture supervises the issues covered by this Regulation.
The Icelandic Food and Veterinary Authority and local public health authorities under the supervision of the Icelandic Food and Veterinary Authority are responsible for implementing and monitoring the enforcement of the provisions of this Regulation in accordance with Article 22 of Act No. 93/1995 on Foodstuffs.
The Icelandic Food and Veterinary Authority issues a national strategy plan for control and responses to campylobacter in poultry farming and poultry products, in keeping with Regulation No. 1048/2011 on the monitoring of zoonoses and zoonotic agents.

Article 4
Monitoring of campylobacter before distribution of poultry meat
Slaughtering products from poultry on the market that have not been frozen or heat treated shall be from poultry for which it has been confirmed by sampling from the flock during the fattening period, or from the slaughter flock at the time of slaughter, that campylobacter has not been detected in the flock in question. Samples from the fattening period to be used may not be taken more than five days prior to slaughtering. Failing this, test results from the products in question confirming that campylobacter has not been detected in the production run in question shall be available.
The test results shall be available before the slaughtering products are distributed on the market.

Article 5
Interpretation of the results
Campylobacter is considered to have been detected in a flock if campylobacter spp. is detected in a pooled sample. If campylobacter spp. is not detected in the slaughter sample then campylobacter is not considered to have been detected in the flock.
Campylobacter is considered to have been detected in the slaughter flock if campylobacter spp. exceeds the diagnostic limit (>10 cfu/g) in a pooled sample.
Campylobacter is considered to have been detected in a production run if campylobacter spp. is detected in a pooled sample.

Article 6
**Monitoring intensity of infection of campylobacter during slaughter**
Samples of neck skin shall be taken from slaughter flocks of chickens and turkeys and the results shall be dealt with according to instructions from the Icelandic Food and Veterinary Authority as set out in the national strategy plan of the Icelandic Food and Veterinary Authority for control and responses for campylobacter in poultry farming and poultry products, in keeping with Article 3.

Article 7
**Obligations of food businesses**
Food businesses shall take the samples for the monitoring of campylobacter referred to in Articles 4 and 6 in accordance with Annex I. Food businesses shall be able to present results from the testing of samples for a period of no less than 5 years.
Food businesses shall bear all expenses of sampling and testing of samples.
Food businesses shall inform the Icelandic Food and Veterinary Authority of the results from the testing of samples according to Section C of Annex I.

Article 8
**Legal reference and entry into force**
This Regulation is adopted in accordance with the authority contained in Paragraph 6 of Article 8a and Article 29 of Act No. 25/1993 on Animal Diseases and Measures to Control Them as well as Article 31a of Act No. 93/1995 on Foodstuffs and having regard to Regulation No. 1048/2011 (2003/99/EC) on the monitoring of zoonoses (diseases that can be passed between humans and animals) and zoonotic agents, and Regulation No 1011/2011 on the entry into force of Regulation No 2160/2003 of the European Parliament and of the Council on the control of salmonella and other specified food-borne zoonotic agents. This regulation shall enter into force on 1 January 2020.

*The Ministry of Industries and Innovation, 23 September 2019.*

**Kristján Póir Júlíusson**
Minister of Fisheries and Agriculture.

*Kristján Skarphéðinnsson.*
ANNEX I

A. Sampling

1. Sampling from rearing flocks of domestic poultry
   One pooled sample shall be taken from a rearing flock, consisting of 10 individual samples of fresh faeces, taken from a number of sites in the rearing house, a minimum of 10 g.

2. Sampling at slaughter
   3-5 g of neck skin shall be taken from at least 3 birds picked at random from the slaughter flock of chickens and turkeys. Samples taken according to Article 4 shall also be taken from domestic poultry other than chicken and turkeys. The neck skin samples are added to a single pooled sample of at least 26 g. The samples are taken from the carcasses after refrigeration. The pooled sample can be used for testing salmonella as long as the sample is taken in accordance with the Icelandic Food and Veterinary Authority’s National Control and Action Programme with regard to Salmonella in poultry farming and poultry products.

3. Sampling from products
   3 packages/units are selected randomly from each production run, a minimum of 200 g in total. If the packaging contains more than three units, selecting that packaging is sufficient. Emphasis shall be placed on taking whole chicken with the skin or chicken products with the skin and that nothing has been added to the product.

B. Testing of samples

1. Transporting and preparing samples

   1.1 Samples from breed flocks of domestic poultry
   If the sample will arrive at an official laboratory within 24 hrs. from sampling, the sample may be stored and transported at room temperature or lower, but never below 1°C.
   If the sample will arrive at an official laboratory 24-48 hrs. from sampling, the sample shall be stored and transported at a temperature between 1-8°C. The sample may not freeze and shall be protected from sunlight.

   1.2 Samples taken when slaughtering or from products
   The samples shall be stored and transported to an official laboratory at a temperature between 1-8°C. The sample may not freeze and shall be protected from sunlight.

   1.3 Sample preparation
   Samples shall be stored in a refrigerator at the laboratory. A maximum of 48 hrs. may pass from the sampling until the testing begins. Samples which have reached 0°C or below are not fit for testing.

   Treatment of faecal samples: In order to prepare an initial solution of the sample (dilution 1:10) in the laboratory, a minimum of 10 g of the testing amount shall be added to ninefold its amount (90 ml) of buffered peptone water. The buffered peptone water shall be allowed to reach room temperature prior to the addition. The mixture shall be treated in a stomacher for approximately one minute. Foaming shall be avoided by removing as much air as possible from the stomacher bag. The sample is tested to determine the existence of campylobacter on agar plates with selective medium according to instructions in the standard.

   Treatment of neck skin samples: In order to prepare an initial solution of the sample (dilution 1:10) in the laboratory, a minimum of 26 g of the testing amount shall be added to ninefold its amount (234 ml) of buffered peptone water. The buffered peptone water shall be allowed to reach room temperature prior to the addition. The mixture shall be treated in a stomacher for approximately one minute. Foaming shall be avoided by removing as much air as possible from the stomacher bag. 10 ml (~ 1 g) of the initial solution of the sample shall be transferred to an empty, sterilised test tube and 1 ml out of 10 ml shall be used to determine the total amount of campylobacter on agar plates with selective medium. The rest of the initial solution of the sample (250 ml ~ 25 g) shall be used to detect salmonella.

   Treatment of meat samples from products: In a laboratory, take 3-10 g from a piece of meat from each packaging, including a maximum amount of skin in products with skin. In the case of whole birds, samples are taken from the skin of the neck. The samples are added to one pooled sample of at least 10 g, to be tested according to the relevant standard.
2. **Method of analysis**

The testing shall be conducted by an official laboratory.

The testing of faecal samples shall be conducted according to ISO standard 10272-1:2017 ‘Microbiology of the food chain – Horizontal method for detection and enumeration of Campylobacter spp. Part 1: Detection method’ with direct seeding (without pre-incubation, method C in the standard) or according to NMKL method no. 119, 3rd Edition, 2007, or other comparable methods of analysis that have been approved by the Icelandic Food and Veterinary Authority.

The testing of neck skin samples shall be conducted according to ISO standard 10272-2:2017 ‘Microbiology of the food chain – Horizontal method for detection and enumeration of Campylobacter spp. Part 2: Colony count technique’ or according to NMKL method no. 119, 3rd Edition, 2007, or other comparable methods of analysis that have been approved by the Icelandic Food and Veterinary Authority.

The testing of product samples shall be conducted according to ISO standard 10272-1:2017 ‘Microbiology of the food chain – Horizontal method for detection and enumeration of Campylobacter spp. Part 1: Detection method’ with pre-incubation, method A in the standard with a Bolton broth, or according to NMKL method no. 119, 3rd Edition, 2007, or other comparable methods of analysis that have been approved by the Icelandic Food and Veterinary Authority.

3. **Storing strains**

Strains that have been isolated from the sampling under this Regulation shall be stored for a minimum of two years, unless the Icelandic Food and Veterinary Authority permits otherwise.

C. **Reporting**

Food businesses shall inform official control authorities with regular reports of the results of sampling of domestic poultry and poultry meat, according to instructions as set out in the national strategy plan of the Icelandic Food and Veterinary Authority for control and responses for campylobacter in poultry farming.

The report shall at least contain information on:

- a) the type of sample,
- b) the date of sampling,
- c) tracking number or production run,
- d) method of analysis and
- e) the results.