

Risk of campylobacteriosis from low-throughput poultry slaughterhouses: Statement of purpose

This evidence will assist FSA risk managers to establish appropriate and proportionate levels of *Campylobacter* sampling for low-throughput slaughterhouses. A two-dimensional risk framework was used in this work, where risk is expressed in terms of both probability and impact in a two-dimensional manner, in addition to improvements in the communication of uncertainty (ACMSF, 2020).

1.1 Scope of risk assessment

We aim to assess the per-portion risk, and population-level risk, to UK consumers posed by consumption of broiler meat from broiler carcasses slaughtered in low-throughput slaughterhouses, using high-throughput slaughterhouses ([footnote 1](#)) as the baseline.

All broiler slaughterhouses must comply with the sampling and testing requirements of [Retained Commission Regulation 2073/2005](#). If a certain proportion of samples have high *Campylobacter* levels, hygiene measures need to be implemented at the plant to reduce them. [Annex I Chapter III](#) of this regulation allows, on the basis of a risk analysis, small slaughterhouses producing fresh poultry meat in small quantities to be exempted from the prescribed sampling frequencies. This risk assessment will inform considerations of whether an exception from the prescribed sampling frequency can be applied.

The exposure assessment for this risk assessment was conducted by considering each step of the pathway from farm to fork in the production of broiler meat in the UK. Each step was treated as an individual module, with the factors affecting *Campylobacter* levels assessed. These modules were identified as farm, abattoir, retail and consumer.

In addition, we assess how the risk is affected by the following four sampling scenarios:

- a) Sampling on a weekly basis as per current regulation
- b) Not sampling/testing to ascertain compliance with the *Campylobacter* Process Hygiene Criteria (PHC)
- c) Sampling every other week as is permitted when establishments can demonstrate compliance with the *Campylobacter* PHC for a continuous period of 52 weeks
- d) Sampling at a rate of once every 4 weeks

In each of these scenarios, sampling can be assumed to mean sampling carried out according to the PHC. For *Campylobacter*, the requirements are for there to be a maximum number of samples with high levels (more than 1,000 CFU/g) in 10 consecutive sampling sessions (that is 50 samples). The current criterion accepts up to 15/50 samples with high levels of *Campylobacter* spp. to be compliant. For the risk assessment, the criterion of 15/50 will remain the same regardless of the frequency of testing i.e. whether the sampling sessions are carried out over a 10, 20 or 40 week period.

1.2 Legislation

[Retained Commission Regulation 2073/2005](#) includes criteria for the *Campylobacter* PHC in Annex I, Chapter 2. Within this Annex, Table 2.1 point 9 states that “all broiler slaughterhouses must comply with the sampling and testing requirements”. The requirements are that 50 samples are derived from 10 consecutive sampling sessions. Each sample consists of least 3 pooled neck skins from carcasses after chilling. This means a minimum of 15 broiler carcasses are required in each sampling session.

Since January 2020, no more than 15 samples out of 50 should exceed 1,000 CFU/g *Campylobacter*. From the 1st of January 2025, no more than 10 samples out of 50 should exceed 1,000 CFU/g *Campylobacter*.

The legislation also states that an exceedance requires the following actions to be taken: improvements in slaughter hygiene; review of process controls of animals' origin and of the biosecurity measures in the farms of origin.

However, the annex allows for the central authority, on the basis of a risk analysis, to authorise small slaughterhouses producing fresh poultry meat in small quantities to be exempted from the prescribed sampling frequencies.

1. Low-throughput slaughterhouses process 7,500,000 birds a year or fewer and high-throughput slaughterhouses process more than 7,500,000 birds a year