

Survey of the microbiological contamination of cull ewes and prime lamb at slaughter in England and Wales

Area of research interest: [Foodborne pathogens](#)

Planned completion: 31 March 2024

Project status: Ongoing

Project code: FS900284

Conducted by: Animal and Plant Health Agency (APHA)

Background

It has been nearly 20 years since the last sheep-based abattoir survey has been carried out in the England and Wales. Pathogenic organisms present on prime lamb and cull ewe carcasses after slaughter can persist in the retail product and potentially lead to outbreaks. There is a need for more recent data on the prevalence and levels of pathogenic and commensal microorganisms contaminating the surface of lamb and sheep carcasses as this will inform several areas of the FSA's work. This includes reducing the uncertainties associated with our microbiological risk assessments which allow us to support changes to facilitate the supply of sheep meat and offal under atypical conditions. The survey will also inform future policy work by generating data on hygiene indicator organisms (e.g. Enterobacteriaceae and E. coli) found on sheep carcasses.

Objective and approach

This is a voluntary survey and all abattoirs that slaughter sheep and lambs in England and Wales have been invited to participate. Samples will be taken by FSA operations teams within abattoirs aiming to collect 1380 carcass swab samples over a 12-month period. Samples will undergo detection and enumeration for Salmonella, Campylobacter, E. coli and Enterobacteriaceae by APHA Weybridge.

The main objective of the FSA part of survey is to gather scientific data that will help meet evidence gaps identified during recent risk assessments. It is designed to:

1. Generate a baseline of prevalence and levels of indicator organisms (E. coli and Enterobacteriaceae) in prime lamb carcasses to inform foreign market equivalence assessments.
2. Gather data to enable the FSA to better assess the risk to the consumer of changes to official microbiological sampling requirements for slaughterhouses, for example based on throughput.
3. Gather information on the prevalence and levels of Salmonella and Campylobacter detected on the carcass and in the caecum of culled ewes versus prime lamb.