

The use of a spotter initiative to assist post mortem inspection in UK slaughterhouses

Area of research interest: [Innovative regulator](#)

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Background

Our organisation regulates the whole food industry – from farming, food production and distribution, to retail and catering. It delivers official controls such as inspection for the verification of compliance with food law and takes enforcement action where non-compliance is identified. Officials (i.e. Meat Hygiene Inspectors) are permanently present to conduct post mortem inspection of animals in approved slaughterhouses. This is aimed at ensuring the removal of abnormalities and contamination present in the meat which could be indicative of a public health issue.

Our organisation wanted to investigate what outcomes might occur if production line operatives had a formalised role in assisting officials in post mortem inspection, by flagging any abnormalities they identify during animal processing

Research Approach

The purpose of this piece of research was to assess the effectiveness and impact of the spotter initiative according to the following criteria:

- Rate of detection and Accuracy of detection of abnormality by officials within a slaughterhouse
- Sense of ownership around food safety amongst plant-staff
- Views of Meat Hygiene Inspectors – Attitudes towards their role / food safety

A mixed methods approach was used to examine the above areas.

Using a quasi-experimental approach, detection rates pre and post trial in eight trial plants were compared with a control group of eight matched plants. Data provided by us enabled statistical analysis to establish the effect the trial intervention had on abnormality detection rates, using a difference in difference methodology. This is an approach focussed on evaluating the impact of an intervention on a treated group with a matched control sample and where data have been collected both pre and post-intervention

To complement quantitative data collection, a case study approach was deployed to provide a detailed understanding of trial implementation and perceived impact. The approaches utilised were:

- A one-day on-site visit to each of the trial plants c. 2 weeks after the spotter initiative briefing. Slaughterhouse staff including the FBO, line operatives (those selected as spotters and those who were not), and officials were interviewed so that views could be triangulated. The focus of these interviews was the briefing session trial implementation, with a focus on emerging good practice.
- Follow-up telephone interviews with the FBO c.7 weeks after the trial began. These interviews focused on the four criteria for assessing the trial's impact.
- A second one-day on-site visit took place c.14 weeks after the trial began. The same individuals were interviewed but with a focus on impact.

Results

Analysis of both quantitative and qualitative data indicates that line operatives can play an important role in assisting in the identification of abnormalities.

- There are significant differences in the number of contaminations in sheep for trial and control groups. Control groups saw an increase in the number of contaminations, whereas trial group saw a decrease.
- There are significant differences in the number of sheep and pig abnormalities in trial and control groups. In both species there was an increase in the number of abnormalities in the control group and a decrease for the trial group, meaning there was a large difference in difference.
- Involvement in the trial was reported to increase a spotter's accuracy in terms of their ability to identify abnormalities, which can be detected without incision or palpation.
- Spotters developed a more comprehensive understanding of food safety risks, in particular around abnormalities and applied this knowledge when checking for abnormalities.
- In general line operatives worked hard at becoming an effective spotter. They saw the spotter trial as a challenge and tried to prove they could accurately "spot".
- The trial also impacted line operatives that did not carry out the spotter role. For this to happen, "ordinary" operatives had an interest in the trial and interacted with officials to learn about defects.
- By the end of the trial most MHIs involved gave conditional support for the spotter initiative. Having seen it work in practice, and properly understood why it was trialled led many to see it could contribute to improved public health outcomes.

The findings suggest the spotter initiative could lead to a number of benefits including higher detection rates and the adoption of proactive behaviours to mitigate food safety risks. These benefits have the potential to realise improved public health outcomes.

Research report

England, Northern Ireland and Wales

PDF

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