



Effects of centralizing meat inspection and food safety inspections in Finnish small-scale slaughterhouses



Niina Kotisalo, Jenni Luukkanen, Maria Fredriksson-Ahomaa, Janne Lundén*

Department of Food Hygiene and Environmental Health, Faculty of Veterinary Medicine, University of Helsinki, Finland

ARTICLE INFO

Article history:

Received 16 December 2014
Received in revised form 19 May 2015
Accepted 23 May 2015
Available online 6 June 2015

Keywords:

Small-scale slaughterhouse
Meat inspection
Food safety
Official control

ABSTRACT

The official control of small-scale slaughterhouses has received criticism for inconsistent meat inspection fees and for the poor quality guidance and cooperation with food business operators (FBO) in Finland. The official control including both meat inspection (ante and post mortem) and food safety inspections (verification of FBO's self-inspection) of small-scale slaughterhouses was centralized from municipalities to the National Food Safety Authority (NFSA) in 2011 to address these perceived shortcomings. This study aimed to investigate the early effects of the centralization of meat inspection and food safety inspections, specifically the standardization of meat inspection fees and the quality of meat inspection services. In March all small-scale slaughterhouses ($n = 52$) received a questionnaire on the effects of centralizing meat inspection. We interviewed 12 small-scale slaughterhouses on site and the official veterinarians of ten of these small-scale slaughterhouses by phone.

The results showed that introducing a meat inspection fee structure based on fixed hourly taxation that includes a fixed travel expense, can lead to more standardized fees. The variation in meat inspection fees after centralization was significantly smaller (Levene's test, $p = 0.013$) than before. Moreover, after centralization, meat inspection fees and the number of slaughtered animal units per year showed no significant correlation. Meat inspection fees decreased for the majority of FBOs, which was expected because of the government subsidies the FBOs received. The majority of FBOs perceived the guidance as good both before and after centralization, and both FBOs and official veterinarians assessed their cooperation as good. The availability of official veterinarians to perform ante and post mortem inspections posed no problem for most FBOs. However, 50% of the FBOs interviewed stated that the official veterinarian had performed no food safety inspections after centralization, which can negatively impact food safety. The majority of the official veterinarians stated that the guidance they received from the NFSA improved after centralization, but they still urged more guidance on interpreting food safety requirements and performing food safety inspections.

© 2015 Elsevier Ltd. All rights reserved.

Introduction

Small-scale meat businesses are important for maintaining local meat production, however, they face many challenges, some of which are related to food safety regulations and their implementation. Such challenges have been recognized in both Europe (Yapp and Fairman, 2006; Tähtkääpää et al., 2009) and North-America (Worosz et al., 2008; Miewald et al., 2013; Charlebois and Summan, 2014). Also, high and unfairly distributed fees for official food inspection are considered problematic for food business operators (FBOs) in the EU (EC, 2009).

Similar problems have been observed in small-scale meat processing in Finland, an EU member state. Previous studies have found the quality of meat inspection (ante and post mortem inspection) and food safety inspections (verification of FBO's self-inspection¹) inconsistent, and cooperation between official veterinarians and FBOs poor (Rahkio, 2009; Hatakka, 2010; MMM, 2010). Cooperation with official veterinarians plays a central role, as they perform both meat and food safety inspections in small-scale slaughterhouses. The inconsistency of meat inspection fees in Finnish small-scale slaughterhouses has also been criticized (Rahkio, 2009; Hatakka, 2010; MMM, 2010). Meat inspection fees are high and vary widely between small-scale

* Corresponding author at: Department of Food Hygiene and Environmental Health, Faculty of Veterinary Medicine, P.O. Box 66, 00014 University of Helsinki, Finland. Tel.: +358 294157148.

E-mail address: janne.lunden@helsinki.fi (J. Lundén).

¹ FBO's self-inspection comprises, for example, HACCP, cleaning and waste management. The official veterinarian verifies that the FBO carries out the self-inspection adequately.

slaughterhouses. Meat inspection fees in small-scale slaughterhouses in Finland are on average seven times higher, and in some cases 30 times higher, than EU minimum meat inspection fees (Rahkio, 2009). FBOs have also criticized the unavailability of official veterinarians, and according to inspectors of the Food and Veterinary Office, food safety inspections have failed to adequately address non-compliance in slaughterhouses (FVO, 2013). To improve the quality of meat inspection services and to standardize meat inspection fees, meat inspection organization was centralized in 2011 (Food Act, 2011). The main consequences of this centralization were a shift in responsibility for meat inspection and food safety inspections from the local to the central level and a restructuring of meat inspection fees. Not only has the centralization of meat inspection come under discussion, but the centralization of food control in Finland in general has also been a subject of debate due to inconsistent food control (Hirn, 2011). Therefore, experiences of this centralization of meat inspection in small-scale slaughterhouses can prove valuable when evaluating the possible centralization of overall food control in Finland.

Previously, independent municipalities bore responsibility for small-scale slaughterhouses, but since September 2011 the National Food Safety Authority (NFSA) has been responsible for meat inspection and food safety inspections. Official (state) veterinarians working for the NFSA or municipal veterinarians contracted by the NFSA carry out meat and food safety inspections. Before centralization, meat inspection fees in small-scale slaughterhouses were based on travel and inspection time or the number of animals slaughtered, and municipal control fees varied (Rahkio, 2009; Tähhkääpää et al., 2013), leading to differences in meat inspection fees between FBOs (Rahkio, 2009). After centralization NFSA introduced a fee structure based on fixed hourly taxation (MMM, 2012) which is same for all small-scale slaughterhouses. To increase opportunities for small-scale slaughterhouses to operate, the government began subsidizing small-scale slaughterhouses after centralization at 600,000 euros per year (Haltiala, 2013), which aims to keep meat inspection fees closer to the EU minimum fees.

In addition to ante and post mortem inspections, food safety inspections in small-scale slaughterhouses must take place regularly (EC, 882/2004). Food safety inspections ensure that FBOs' self-inspection is sufficient and fulfills the requirements of food safety legislation. The frequency of food safety inspections is risk-based (EC, 882/2004) and set individually for each slaughterhouse based on its functions and size (Control Program, 2010). Food safety inspections in all small-scale slaughterhouses should occur at least twice annually (Haltiala, 2013) or as often as needed (EC, 882/2004). Non-compliance, such as lack of hygiene and poor traceability, has occurred in small-scale slaughterhouses (FVO, 2013; Haltiala, 2013), which may compromise meat safety (Rahkio and Korkeala, 1996; Blagojevic and Antic, 2014).

Food safety regulations are complex, and previous studies have shown that FBOs often require guidance and education in implementing food safety requirements (Fairman and Yapp, 2004; MMM, 2007; Tähhkääpää et al., 2009; Nevas et al., 2013). Such advice is often provided during food safety inspections (Fairman and Yapp, 2004; Tähhkääpää et al., 2009; Nevas et al., 2013). Although EU-legislation (EC, 854/2004) regulates meat inspection in detail, official veterinarians can play an important role in the implementation of these requirements on site. An assistive approach by inspectors is considered beneficial to compliance (Buckley, 2015).

Not only do FBOs require guidance in implementing food safety regulations, but also official veterinarians conducting meat and food safety inspections need guidance in implementing the requirements and promoting compliance. The interaction between the FBO and the inspector has become an important factor in promoting or impeding operations and the implementation of regulations (Buckley, 2015). This places high demands on the guidance that the NFSA provides for its official veterinarians.

Meat and food safety inspections aim to ensure meat safety. Meat inspection is also crucial in preventing animal diseases and in ensuring animal welfare (EFSA, 2011). Although the numbers of slaughtered animals are much smaller in small-scale slaughterhouses than in large slaughterhouses (HE, 2010), the biological hazards remain the same. It is therefore important that small-scale slaughterhouses also benefit from high quality meat inspection services.

The aim of this study was to investigate the early effects of the centralization of meat inspection and food safety inspections on small-scale slaughterhouses. The specific aims were to investigate whether the new meat inspection fee structure standardized fees between small-scale slaughterhouses and to study the quality of meat inspection services from the perspective of FBOs and official veterinarians both before and after centralization.

Material and methods

Small-scale slaughterhouses in Finland

This study included all small-scale slaughterhouses in operation in Finland. In March 2012, the NFSA's list of approved establishments (NFSA, 2012) contained 52 small-scale slaughterhouses in Finland (Table 1). A small-scale slaughterhouse in Finland is allowed to slaughter up to 1000 animal units per year. One animal unit equals one bovine or horse, five pigs, ten sheep or 150,000 poultry (MMM, 2011).

The questionnaire and the interviews

All small-scale slaughterhouses received a questionnaire in March 2012 on the effects of the centralization of meat inspection. The FBOs received a printed questionnaire by mail, but could also answer this same questionnaire online. The questionnaire inquired about meat inspection fees and the quality of meat inspection services both before and after meat inspection centralization. Questions about the availability of official veterinarians, cooperation with the official veterinarians and opinions on the advice they provided measured the quality of meat inspection services. The questionnaire contained both Likert-scale questions (totally agree, partially agree, partially disagree, totally disagree and do not know) and open-ended questions. The small-scale slaughterhouses received the questionnaire when the official control had been centralized for seven months. The study was conducted early after the centralization in order to recognize the first effects of the change. This would enable NFSA to intervene at an early stage if the results implied the need for changes.

With the help of a structured form, we interviewed 12 small-scale slaughterhouse owners on site to obtain detailed information about meat inspection fees and the quality of meat inspection services. The interviews allowed us to further explore the FBO's opinions concerning the causes of possible problems in the availability of official veterinarians, cooperation or guidance. For instance, if the cooperation was considered poor, we asked the interviewee to provide specific examples of poor cooperation. The small-scale slaughterhouses interviewed for the study were chosen based on their locations to cover the country (Table 1). Ten of the official veterinarians responsible for the official control of these small-scale slaughterhouses were interviewed by phone about the cooperation with the FBO as well as the FBO's knowledge of food safety regulations. We also investigated the official veterinarians' opinions on the guidance that the NFSA provided to them. Two of the official veterinarians did not participate in the interview.

Download English Version:

<https://daneshyari.com/en/article/5070324>

Download Persian Version:

<https://daneshyari.com/article/5070324>

[Daneshyari.com](https://daneshyari.com)