Auditing animal welfare and making practical improvements in beef-, pork- and sheep-slaughter plants

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Abstract

A welfare audit that utilises numerically scored, animal-based outcome measures has been used successfully by McDonald’s and other restaurant companies for over ten years. In 2010, audit data from two restaurant companies indicated that all 30 of their North American plants rendered 95% or more of the cattle insensible with a single shot from a captive-bolt gun. Eight pork plants that used electrical stunning placed the tongs correctly on 99% or more of the pigs. All animals were insensible prior to hoisting. In 32 beef plants, the percentage of cattle vocalising in the stunning area was 5% or less. In 94% of the beef plants and 86% of the pork plants, none of the animals fell during handling. The worst falling score was 2% in two of the plants. High standards were attained by making simple changes. To improve welfare, plant managers did the following: improved stunner maintenance; installed non-slip floors in stun boxes and unloading ramps; and trained employees. To reduce balking and improve animal movement, the following modifications were made: illumination of dark race entrances; moving of lamps to eliminate reflections; reducing equipment noise; stopping employee yelling; installation of solid sides on races or shields to prevent animals from seeing activity outside the facility; and the elimination of air blowing in the faces of approaching animals. Employees were trained to use behavioural principles of animal handling such as the point of balance and the flight zone. The five numerically scored outcome measures in this audit are critical control points that can detect a variety of problems. They are: i) the percentage of animals stunned effectively with a single application of the stunner; ii) the percentage of animals falling during handling must be 1% or less to pass; iii) the percentage of pigs or cattle vocalising (moo, bellow, squeal) in the stun box or while entering into the stun box must be 5% or less to pass (vocalisation scoring is not used for sheep); iv) the percentage of animals moved with an electric goad; and v) the percentage of animals rendered insensible before hoisting must be 100% to pass an audit. An animal is scored as either silent or as a vocaliser and whether stunned correctly with a single application or not stunned correctly. The audit also contains a list of banned practices that will result in an automatic failure. To maintain improvements in handling, 23 plants have installed video cameras that are monitored by auditors viewing the footage over the internet. These external auditors perform numerical scoring at random times throughout the day. Video auditing over the internet is an important new tool for improving welfare.

Keywords: animal welfare, auditing, handling, slaughter, stunning, vocalisation

Introduction

Welfare audits conducted by major customers have shown that there have been great improvements in the stunning and handling of animals at US and Canadian beef and pork slaughter plants. These improvements are due to both the audit programmes of major restaurant chains and the increased humane slaughter enforcement by the USDA (US Department of Agriculture) veterinary inspectors. Before the customer auditing programmes started in 1999, only 30% of the plants were able to render 95% of the cattle insensible with a single shot (Grandin 1997, 1998a). In 2010, data obtained from two restaurant companies indicated that all 30 of the beef plants they audited for stunning were able to accomplish this. In 77% of the beef plants, 99 to 100% of the cattle were rendered insensible with a single shot from a captive-bolt gun. In eight pork plants that used electrical stunning, the tongs were placed in the correct position on 99% or more of the pigs. Vocalising during stunning and handling was also reduced drastically. Baseline data collected before the auditing started indicated that the average percentage of cattle that vocalised (moo or bellow) was 7.7% and the worst plant had 32% of the cattle vocalising due to excessive pressure from a restraint device (Grandin 1997, 1998b). In 2010, audit data collected by third party auditors in 32 beef plants showed a huge improvement. Ninety-seven percent of the US and Canadian beef plants had 3% or less of the cattle vocalising. The worst score was 5%. A kosher plant that used an upright restraint box had a 2% vocalising score. In contrast to this a survey conducted in a beef plant in France indicated that 25% of the cattle vocalised in a restraint device (Bourquet et al 2011).