



## Dehorning of cattle in the EU Member States: A quantitative survey of the current practices



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### ABSTRACT

A survey was carried out to describe the extent and current practice of cattle disbudding/dehorning in the EU Member States. Disbudding was defined as removal of horns in calves of up to 2 months of age, whereas dehorning was defined as removal of horns in older animals. Specific questionnaires were created regarding dairy, beef, and suckler production systems and they were submitted to local experts of each country belonging to relevant institutions like universities, national farmers' associations, cattle breeders associations, farm veterinarians and practitioners. Figures on disbudding/dehorning practices were produced for each production system for both the whole European Union and the North, Centre, East and South EU macro-regions. A total of 652 questionnaires were collected and 64%, 24% and 12% of them related to dairy cattle, beef cattle and suckler cows, respectively. Data from the survey showed that in Europe, 81% of the dairy, 47% of the beef and 68% of the suckler currently keep disbudded/dehorned animals, while the prevalence of polled cattle is rather low, especially in the dairy cattle sector (5% of all cattle farms; < 1% of dairy farms). Regardless of production system, prevalence of dehorned animals is the highest in the North macro-region. Polled cattle farms are almost exclusively located in the North where polled beef breeds are raised for fattening. Dehorning is performed primarily on loose housed cattle to reduce the risk of injuries for herdsmates and the stockman. Dehorning is less frequently performed in organic farms. As method of horns removal, disbudding is generally preferred over surgical removal of the horns in older cattle. Hot-iron is the most used disbudding method especially in the North and Centre. Use of caustic paste is reported more frequently in the South and the East. In the large majority of EU farms, the stockman is the person in charge for disbudding and some kind of medication for pain relief is administered to the animals only in a small percentage of

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farms (< 30%). Surgical dehorning of more aged cattle is mainly performed with the wire/saw method. Compared to disbudding, it is more often carried out by a veterinarian and pre- and post operative medications (44% farms) is also more common.

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## 1. Introduction

Animal welfare is becoming an important issue in the European scenario of livestock husbandry and farm practices. Together with other changes of the phenotype that have become a common practice in the modern animal husbandry (e.g. beak trimming of laying hens, castration and tail docking of piglets), the removal of the horn buds or of the horn in cattle has been under the scrutiny of public opinion. Dehorning of cattle is common practice particularly in modern dairy holdings, in order to reduce the risk for the stockpersons during routine management practices and veterinary examinations (Duffield, 2008). Horned cows can also cause injuries to herd mates during aggressive interactions and competition at the feeding gate (NFACC, 2009; AVMA, 2010).

So far, available data on dehorning practices have been gathered only from dairy farms of traditional dairy areas of North America and Europe (Fulwider et al., 2008; Gottardo et al., 2011; Hoe and Ruegg, 2006; Misch et al. 2007; Stock et al., 2013; Vasseur et al., 2010). No published information is available for beef and suckling herds.

In the European Union, the practice of dehorning is regulated by the European Council Directive 98/58/EC (1998), laying down the general minimum standards for the protection of farm animals. According to the Directive, animals should not experience unnecessary pain, suffering or injury. As all member states and the European Union are contracting parties to the European Convention for the Protection of Animals Kept for Farming Purposes, the Recommendation concerning Cattle (Council of Europe Standing Committee, 1988) applies. It lays down that except for chemical and heat cauterization in calves under four weeks of age, disbudding/dehorning shall be carried out under local anaesthesia by a veterinary surgeon or any other person qualified according to domestic legislation. However, national rules regarding disbudding/dehorning are rather inhomogeneous (Cozzi et al., 2009). Moreover, information on the actual implementation of possible legal standards and on current practices are very scarce. Therefore, in order to broaden the existing knowledge to which extent cattle are dehorned and the way the procedures are carried out, a quantitative survey was carried out in the EU Member States within the tender project Alternatives to Castrations and Dehorning (SANCO, 2009) funded by Directorate General for Health & Consumer of the European Commission. Main tasks of the survey were to assess how many farms are dehorning their cattle, why and how the procedure is carried out. Figures on dehorning practices and on the prevalence of disbudding/dehorning were produced for the European Union as all and comparisons could be made between the 4 EU macro-regions (North, Centre, East and South) and between production systems (dairy, beef and suckler).

## 2. Materials and methods

The survey covered the whole European Union by establishing contacts in each Member State with local experts from relevant institutions like universities, national farmers' associations, cattle breeders associations, farm veterinarians and practitioners. Disbudding was defined as removal of the horn buds in calves of up to 2 months of age, whereas dehorning was defined as removal of the horns in older animals.

### 2.1. Questionnaires

Three specific questionnaires were created and submitted to local experts of dairy, beef and suckler herds husbandry in all Member States. Beef farms were classified as specialized units addressed to the fattening and finishing of young cattle for beef production. Suckler herds were productive units that maintain a breeding herd and usually sell weaned calves to beef farms. In each EU country, the questionnaires gathered information on herd management and housing systems. Specific questions were addressed towards the dehorning practices and the presence of polled cattle. Further questions were focused on the method used to disbud/dehorn, the person in charge of the procedure, the use of medications pre- or/ and post-dehorning (sedation, local anaesthesia, analgesia and their combination) and the postoperative use of a local disinfectant. A last question addressed the main reason for carrying out the practice choosing among 6 alternatives answers: 1. to reduce the risk of injuries for the stockman; 2. to reduce the risk of injuries among herdmates; 3. to allow an easier cattle handling; 4. to adjust cattle to existing housing facilities (i.e. feeding rack); 5. to reduce carcass depreciation due to skin lesions; 6. other reasons (reported by the respondent).

### 2.2. Data collection and statistical analysis

Data were collected from January to April 2009 and processed at European level according to the production system (dairy, beef and suckler). Further data processing considered a geographical factor by allocating the EU countries in 4 macro-regions as follows: North (Denmark, Estonia, Finland, Ireland, Latvia, Lithuania, Sweden and United Kingdom); Centre (Austria, Belgium/Luxemburg, Czech Republic, France, Germany, Netherlands and Slovakia); East (Bulgaria, Hungary, Poland, Romania and Slovenia); South (Cyprus, Greece, Italy, Portugal and Spain).

Overall results for the European Union and the four macro-regions were calculated weighing data from each Member State by the number of cattle reared in the same country according to EUROSTAT 2007. Data reported for

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