



Visual and tactile contact in individually housed calves



Picture: Lensink, CASE



Biology and needs of calves

It is common practice in the dairy sector to separate calves from their dam shortly after birth and to keep them in individual pens during the first weeks of life. This routine, however, disregards the social nature of bovine species and strongly limits or even rules out social contact between a calf and other adult or young conspecifics.

The Directive 2008/119/EC specifically refers to visual and tactile contact. Visual contact is one of the most important means of communication in cattle and may involve movements of the whole body or only parts of it. Especially the position of the head in relation to the body plays an important role. Tactile communication has been described as important in affiliative (e.g., allogrooming) and play behaviour.

In (near-)natural settings, different interactions between a calf and their herd mates (i.e. its dam, other adult or young animals) can be observed. Young calves' distance to their mothers gradually increases with age while the social relationship with other herd members is strengthened. Interactions between calves take place during playing, grazing and resting and there seems to be a peak in the amount of time calves spend in the presence of other calves when they are between 2–7 weeks of age.

Calves engage in play behaviours (e.g. head butting, mounting, jumping, running, chasing other calves) which increase in frequency over the first 2 weeks of age. Before the age of 2 months, interactions between calves are largely non-agonistic, however, activities resembling fights (i.e. 'mock fighting') occur as soon as 2 weeks of age.

It was shown that dairy calves are motivated for social contact during the first 8 weeks of life. During an experimental setup, it was demonstrated that calves are more motivated (i.e. they work harder) for unrestricted social contact with a conspecific than for contact with the conspecific's head through metal bars only. Further, there is evidence that social isolation during infancy is associated with abnormal behaviour and developmental problems, which is why social contact in early life is key to normal development.



Legal requirements

Council Directive 2008/119/EC of 18 December 2008, laying down minimum standards for the protection of calves, makes it clear that calves older than 8 weeks must not be housed individually. Further, individual pens for calves (except those for isolating sick animals) must not have solid walls, but perforated walls which allow the calves to have direct visual and tactile contact.



Method

Council Directive 2008/119/EC of 18 December 2008, laying down minimum standards for the protection of calves, makes it clear that calves older than 8 weeks must not be housed individually. Further, individual pens for calves (except those for isolating sick animals) must not have solid walls, but perforated walls which allow the calves to have direct visual and tactile contact.

Focus areas for inspection

Structural features of pens or hutches for individually housing calves can be used as proxies for assessing the level of visual and tactile contact allowed between animals.

- Front, side and back walls are assessed for their potential to allow visual and tactile contact

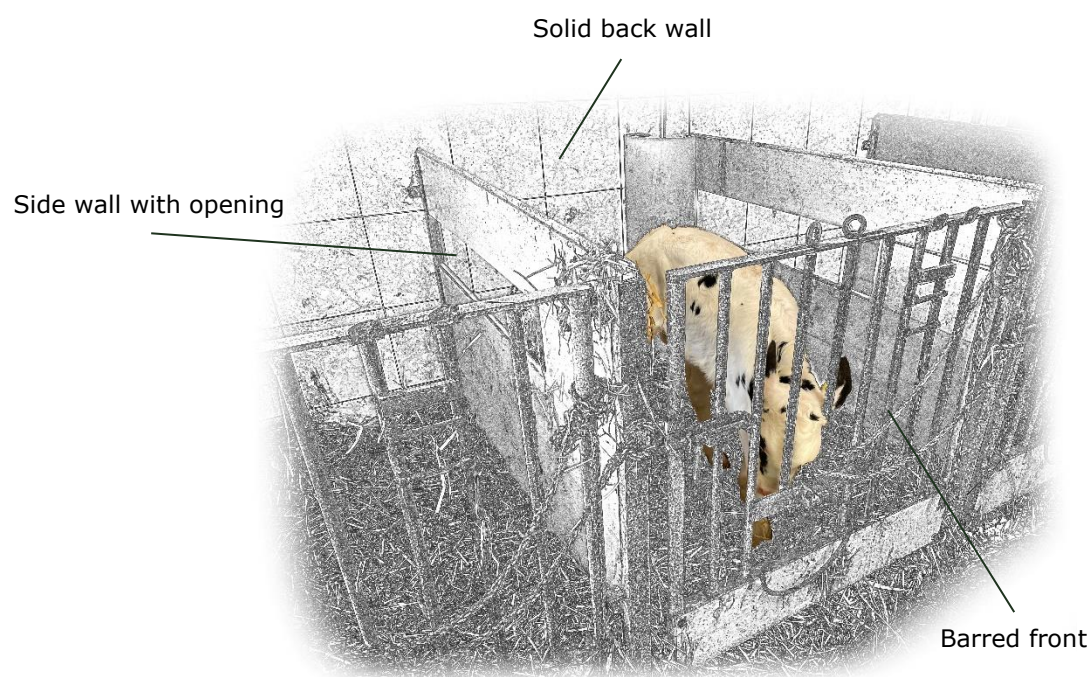


Figure 1: Example of pen for individual indoor housing

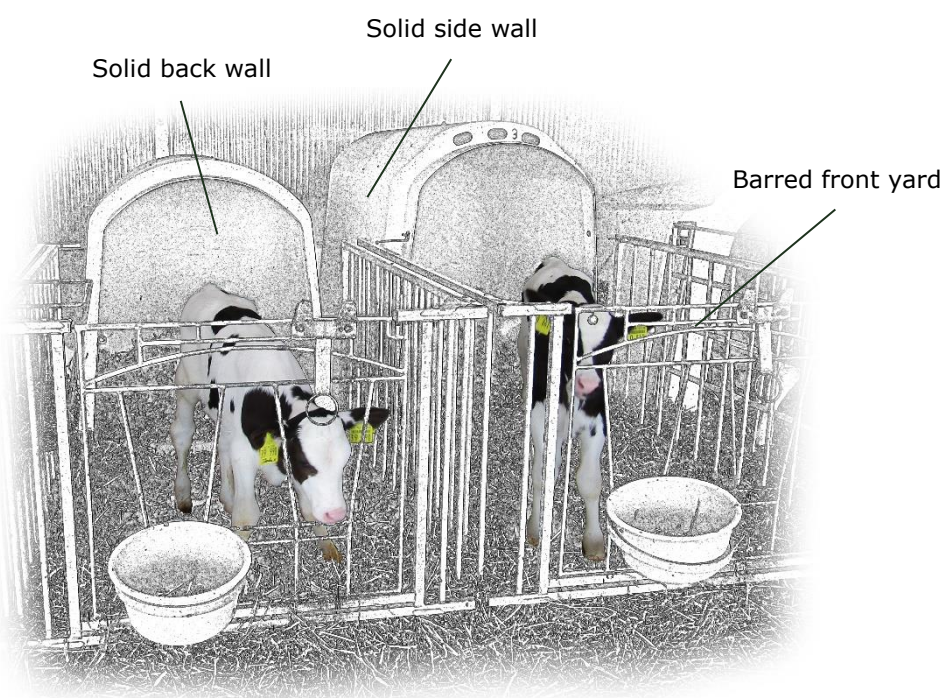


Figure 2: Example of hutch with front yard for individual outdoor housing

Legal requirements

Council Directive 2008/119/EC of 18 December 2008 laying down minimum standards for the protection of calves.

'This Directive lays down the minimum standards for the protection of calves confined for rearing and fattening.'

(Article 1)

'(...) 'calf' means a bovine animal up to six months old'

(Article 2, Paragraph 1.)

'(...)

(a) no calf shall be confined in an individual pen after the age of eight weeks, unless a veterinarian certifies that its health or behaviour requires it to be isolated in order to receive treatment. The width of any individual pen for a calf shall be at least equal to the height of the calf at the withers, measured in the standing position, and the length shall be at least equal to the body length of the calf, measured from the tip of the nose to the caudal edge of the *tuber ischii* (pin bone), multiplied by 1.1.

Individual pens for calves (except those for isolating sick animals) must not have solid walls, but perforated walls which allow the calves to have direct visual and tactile contact;

(...)

However, the provisions of the first subparagraph shall not apply to:

(a) holdings with fewer than six calves;

(b) calves kept with their mothers for suckling.'

(Article 3, Paragraph 1.)



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