

Lairage Cleanliness

The cleanliness of the lairage environment is important in the maintenance of coat cleanliness. Grau and Smith (1974) found that sheep fleeces became contaminated with salmonellae within one day of entering contaminated animal pens, and this contamination increased with the length of time spent in the lairage and with the degree to which the pen floors were contaminated. In the first two days of lairaging, only a few sheep excreted *Salmonella* in the faeces, but there was a rapid increase in the numbers excreting *Salmonella* after 2-3 days. Lambs carrying less contamination on their fleeces will decrease the level of contamination brought into the abattoir environment but wet pens can increase the microbial load on sheep fleeces (Duffy *et al.* 2000). Large numbers of Gram negative and Gram positive organisms have been found in cattle lairages, including contamination of the air and water (Patterson and Gibbs 1978), and the normal cleaning and disinfection procedures in lairages have been found to be insufficient to remove environmental contamination with *Salmonella* spp. (Swanenburg *et al.* 2001) and other foodborne pathogens (Small *et al.* 2002). Fresh cattle faeces are reported to contain an aerobic plate count of 6-7 log/g (Bell 1997), and an adult bovine can void up to 25.5 kg of dung and 12-22 litres of urine in 24 hours (McGrath and Patterson 1969). So, if there is insufficient bedding or drainage in animal accommodation, faecal soiling of the skin can occur (Gregory 1994), and under conditions of close contact and consequent body soiling, animals, by licking, can become regularly infected with larger numbers of faecal organisms than when kept under more spacious conditions (Heard *et al.* 1972). It is often the practice within Australian abattoirs to either reject animals that are delivered to an abattoir in an 'exceptionally dirty' state, or they can be separated and held for treatment before they are processed. These 'higher risk' animals are then processed at the end of the day.

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