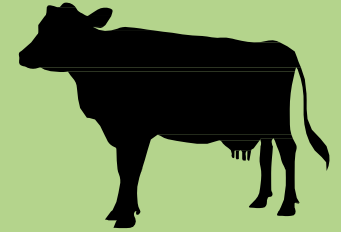




Reducing disease risk from feed storage units

Advice for cattle farmers



- **Regular cleaning of feed storage is vital to maintain the health of your animals.**
- **Due to the potential risk of BSE from feed predating the reinforced feed ban of 1 August 1996, we strongly recommend silos that pre-date 1 August 1996 be decommissioned and replaced, especially if these are difficult or hazardous to clean.**
- **If it is not possible to decommission and replace feed silos that pre-date 1 August 1996, then we strongly urge you to arrange for cleaning as soon as is practicably possible to ensure that any remnants of old feed are removed.**
- **Dry or vacuum methods are preferred for removal of feed residues, followed by use of disinfectant to ensure the best hygiene.**
- **If cleaning your silo is likely to be particularly difficult or hazardous to your health and safety and/or that of others, we recommend that you use a professional cleaning service.**

Introduction

Cleaning of feed storage facilities – silos, floors, bays, bins – prior to receipt of new consignments of feed is important to maintain healthy and productive animals.

Removing residues from earlier feed consignments reduces the risk of contaminating fresh feed supplies. Remnants of old feed, especially within silos and bins, may cause feed spoilage and illness e.g., due to mould, or give rise to residues from contaminants and deterioration of feed quality.

Regular cleaning of silos and bins is recommended especially in areas where feed may become trapped within, e.g., in joints and grooves, and may remain there for many years.

BSE Risk

Bovine Spongiform Encephalopathy (BSE) in cattle was caused by consumption of rendered animal products contaminated with the BSE agent. Strict controls to prohibit the inclusion of animal proteins in feed for farmed animals have been successful in reducing the number of BSE cases from a peak of 36,000 cases in 1992, to just 7 cases in the last 10 years. While cases of classical BSE are now rare, occasional cases still occur, most recently in England in 2021. This case was potentially linked to a feed silo which had not been thoroughly cleaned out since before August 1996 due to the design and location and may have contained residual contaminated feed.

To further reduce the potential risk of BSE from feed predating 1 August 1996, we strongly recommend silos that pre-date 1 August 1996 be decommissioned and replaced, especially if these are difficult or hazardous to clean.

On-Farm Storage

There are many options for on-farm feed storage. These include:

1. storage bins or silos for bulk materials which may be sealed or unsealed.
2. bunkers or bays for storing bulk materials on the floor, usually separated by concrete or wooden partitions.
3. sheds or other farm stores for bagged ingredients; and
4. feed stored in heaps in unsealed buildings.

Cleaning protocol

1. There should be a documented system to ensure all production and storage areas and equipment are effectively cleaned to maintain feed safety. Cleaning activities should be recorded. Records should be kept for a minimum of 7 years.
2. A standard operating procedure should be drawn up to ensure that all storage facilities are completely emptied and cleaned regularly in accordance with the type and condition of product stored. Where appropriate, storage areas should enable goods to be stored in a clean, dry, and orderly condition.
3. Cleaning methods should minimise the risk of contamination, and wherever possible not introduce moisture nor generate dust which could be a reservoir for bacteria. Vacuum cleaning is a preferred method for removal of old feed residues.

4. Keeping the products (except for moist products) dry is important since moisture can cause bacteria etc. to multiply. Possibilities for movement of dust between storage compartments should be minimised.
5. Storage bays/bins/silos/areas should be organised to permit suitable and effective separation and identification of the various products.
6. Any chemicals used for cleaning product contact surfaces must be suitable for this purpose and used in accordance with the manufacturer's instructions (i.e., Products which are on the [Defra- approved disinfectant list](#) for General Orders at the General Orders dilution rate).
7. Equipment and machinery which comes into contact with dry product, if subject to wet cleaning, must be dry before use.
8. Wet cleaning is often undesirable and should only be used where shown to be necessary and may include appropriate disinfection.
9. On all farms, regular cleaning to remove residues of earlier feeds from troughs and hoppers is essential.
10. Where it is not possible to clean out storage systems between refilling it would be good practice to empty and clean, before refilling, at least once every 12 months. You should pay particular attention to areas where old feed can become lodged, such as in grooves and crevices in silo systems. If it is possible to dismantle 'closed' systems to clean them, you should do so.

