



Australia
New Zealand
Dairy Authorities'
Committee

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06

Guidelines For Food Safety

Dairy Farms



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Introduction

This Guideline provides a framework for the development of a dairy farm food safety program and outlines the minimum food safety outcomes that a dairy farm operator should be managing.

The information in these guidelines is based on the following food safety criteria:

- Control and prevention of microbiological contamination;
- Control and prevention of chemical contamination;
- Control and prevention of physical contamination; and
- Effective identification and traceability.

The food safety program requirements in this Guideline are based on a risk assessment of a general dairy farm operation, irrespective of whether it milks cows, goats, sheep or buffalo. The risk assessment was conducted in accordance with the Hazard Analysis and Critical Control Point principles as outlined in *Codex Alimentarius, Basic Texts on Food Hygiene, FAO/WHO, Annex Hazard Analysis and Critical Control Point (HACCP) Systems and Guidelines for its Application*.

Words or phrases in *italics* have a corresponding definition.

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Definitions

Agricultural Chemicals

Includes any substance used as a pesticide, herbicide or fungicide.

Cleaning

A process to remove all physical contamination, residues and odours. This includes sanitising where necessary.

Cleaning Chemicals

Any substance used in the cleaning process.

Consumer

The end product user.

Contamination

The presence of any chemical, physical matter, microbiological toxin or pathogen that presents a risk to food safety or is not intended or expected to be present.

Dairy

Includes the milk shed and all associated equipment including milk vats.

Non-conformance

Where equipment, product or management practices do not meet minimum food safety outcomes, or where a requirement of a food safety program has not been followed.

Permanently Identified

Identification that cannot be easily removed and is able to be understood by a third party.

Secure

Is unlikely to result in contamination of milk.

Training

Includes external training (eg. chemical users course, dairy apprenticeship etc.) or internal training (eg. on the job training, induction training, verbal and demonstrative training etc.)

Veterinary Drugs

Includes any substance administered or applied to an animal for the purposes of treating or preventing a disease, pest infestation, injury or any substance used to modify the physiology of an animal.

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Milking Sheds

4.1 Construction and Equipment

- 4.1.1 The food safety program must identify how frequently maintenance reviews are conducted.
- 4.1.2 All construction and equipment non-conformances must be rectified.
- 4.1.3 The construction, maintenance and use of the milking shed, milk vat and milking equipment must protect milk from contamination during milking, storage and collection.
- 4.1.4 Milk contact surfaces must be easy to clean, disinfect and be corrosion resistant.

Outcome

To ensure that milk is protected from contamination.

4.2 Cleaning

- 4.2.1 The food safety program must identify the methods used to clean and the frequency of cleaning.
- 4.2.2 All cleaning non-conformances must be rectified.
- 4.2.3 All cleaning chemicals must be suitable for their intended purpose.
- 4.2.4 All cleaning chemicals must be used in accordance with manufacturer's instructions.
- 4.2.5 All cleaning chemicals must be labelled, handled, securely stored and disposed of so as to ensure food safety is not jeopardised.
- 4.2.6 Effluent must be disposed of in a manner that does not jeopardise food safety.
- 4.2.7 The milk vat and milking equipment must be thoroughly cleaned, disinfected, rinsed and drained if required. Water used for cleaning and rinsing must not contaminate milk.
- 4.2.8 Hot water capacity and temperature must be sufficient to provide effective cleaning.

4.3 Water

- 4.3.1 For water used within the dairy, the food safety program must describe:
 - a) The source of water supplied;
 - b) Any treatment of water;
 - c) The uses for water; and
 - d) Any applicable water management plan.
- 4.3.2 Water used on dairy farms must not jeopardise food safety.
- 4.3.3 Water used for cleaning udder and teat surfaces must not contaminate milk.
- 4.3.4 Milking animals must not consume or have access to contaminated water that is likely to cause disease transmissible to humans or contaminate milk.

4.4 Use of Dairy

- 4.4.1 The dairy must not be used for any purpose that may compromise food safety.
- 4.4.2 Milk vats must not be used to store harmful substances that may contaminate milk.

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Milk Chilling

5.1 Milk Chilling Capability

5.1.1 Milk must be chilled to 5°C or less within 3.5 hours from the start of milking. The food safety program must identify how milk chilling capability is checked and the frequency of such checks. Records must be kept to demonstrate conformance to this requirement.

5.2 Milk Storage

5.2.1 The food safety program must have records that show milk is maintained at 5°C or less after chilling is completed.

5.3 Calibration

5.3.1 The food safety program must describe:

- a) How thermometers are checked for accuracy;
- b) How frequently checks occur.

5.3.2 Calibration records must be kept.

Outcome

To minimise contamination of milk by pathogens and toxins.

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Farm Management

6.1 Agricultural Chemicals and Veterinary Drugs

6.1.1 The food safety program must describe how animals (including introduced animals), pastures and feeds treated with agricultural chemicals or veterinary drugs are identified.

6.1.2 Records for the use of agricultural chemicals and veterinary drugs must be kept and must identify:

- a) Date of use;
- b) Who applied/administered;
- c) Chemical/drug used;
- d) Rate of application;
- e) What was treated (eg. paddock number, silo number, cow ID etc.); and
- f) Withholding period/clearance date.

6.1.3 All agricultural chemicals and veterinary drugs must be:

- a) Suitable for use on dairy farms;
- b) Used in accordance with manufacturers or a veterinarians written instructions; and
- c) Labelled and stored in a *secure* manner.

Outcome

Farm management practices must ensure safe milk production.

- 6.1.4 Continued management of veterinary drug use in herd replacements and during dry and lactation periods must be maintained.

6.2 Traceability

- 6.2.1 The food safety program must describe the method of stock identification.
- 6.2.2 All stock must be permanently identified.
- 6.2.3 Records must be kept for all milk that leaves the dairy. These records must include:
 - a) Date and time milk leaves the dairy;
 - b) Name and address of milk recipient; and
 - c) Quantity.
- 6.2.4 Records allowing traceability of other farm inputs that can impact on food safety must be maintained where necessary.

6.3 Stockfeed

- 6.3.1 The food safety program must provide for a declaration from stockfeed suppliers to be obtained and kept. Declarations must identify:
 - a) Name of supplier;
 - b) Description of stockfeed and date (or period) of supply;
 - c) Chemical residue status; and
 - d) Any applicable withholding periods.
- 6.3.2 Stockfeed must not pose a risk of contamination to milk.
- 6.3.3 Stockfeed containing any material derived from animals, with the exception of tallow, gelatine and dairy products must not be fed to ruminants.

6.4 Pest Control

- 6.4.1 Where pest control is achieved through the use of pesticides the food safety program must describe how they are used.
- 6.4.2 Records for the use of pesticides must be kept and must identify:
 - a) Date of use;
 - b) Who applied;
 - c) Pesticide used;
 - d) Rate of application; and
 - e) What area was treated.
- 6.4.3 Pesticide use must not pose a risk of contamination to milk.

6.4.4 Pesticides must be used in accordance with the manufacturer's instructions.

6.4.5 Pesticides must be labelled and stored in a secure manner.

6.5 Milking

6.5.1 Animals that show any evidence of infectious diseases transferable to humans through milk must be segregated and milk withheld from supply.

6.5.2 Milking areas must be kept free from undesirable animals whose presence may result in the contamination of milk.

6.5.3 The food safety program must identify the procedures used for isolating:

- a) Milk from animals treated with veterinary drugs; and
- b) Milk from animals showing evidence of infectious disease to humans.

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Competency

7.1 All people involved in milking, administration of veterinary drugs and application of agricultural chemicals must understand the risks to food safety that relate to these activities.

Outcome

To ensure that people involved in dairy farming do not jeopardise food safety.

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Responsible Persons

- 8.1 The food safety program must identify:
 - a) The person responsible for the overall implementation of the food safety program; and
 - b) Where relevant, the person(s) responsible for implementation of the sections of the food safety program.
- 8.2 Where the food safety program applies to dairy farms operated by other businesses, the person responsible for the food safety program must have sufficient authority and control to deliver the required outcome.

Outcome

To ensure accountability for food safety.

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Management of Non-Conformances

- 9.1 The food safety program must describe where *non-conformances* are recorded.
- 9.2 Records for *non-conformances* must include:
 - a) Date non-conformance identified;
 - b) Action taken to control the non-conformance;
 - c) Action undertaken to prevent reoccurrence; and
 - d) Proposed date in which the action will be completed.

Outcome

To ensure that non-conformances do not jeopardise food safety

