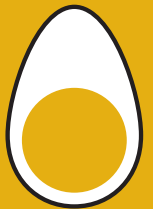


Animal Welfare (Layer Hens) Code of Welfare 2012

Minimum Standards and Example Indicators for Barn and Free-Range Production Systems



Egg Producers
Federation of
New Zealand (Inc)

The Animal Welfare (Layer Hens) Code of Welfare 2012 sets the minimum standards for the care and management of layer hens under all forms of management used in New Zealand. These standards must be achieved by the owners of layer hens and by the persons who are in charge of them in order to meet their obligations under the Animal Welfare Act 1999.

1 Stockmanship

- Layer hens must be cared for by personnel who possess the appropriate ability, knowledge and professional competence to maintain their health and welfare in accordance with the Minimum Standards listed in this Code.
- Staff must be suitably trained to handle an emergency, e.g. fire evacuation.

Example indicators for Minimum Standard No. 1 Stockmanship

- Layer hens are maintained in accordance with requirements of this Code
- Operational procedures are documented and implemented
- Documentary evidence of staff training/ competence is maintained
- Personnel have an understanding of the Code of Welfare and their obligations
- There is evidence of staff trained and practised in emergency management, e.g. fire evacuation

2 Food and Water

- All layer hens must receive adequate quantities of food and nutrients each day to enable them to:
 - maintain good health;
 - meet physiological demands; and
 - avoid metabolic and nutritional disorders.
- All layer hens must have continuous access to water that is sufficient for their needs, palatable and not harmful to health, including up until the time of depopulation.
- The interval of time from hatching to first feed and drink must be as short as possible and no more than 48 hours.
- Food and water must be provided in ways to prevent undue competition and injury.
- Hens that cannot access food and water adequately must be removed during daily inspections, and raised separately or humanely destroyed immediately.
- Food must not be withheld for more than 12 hours before depopulation.

Example indicators for Minimum Standard No. 2 Food and Water

- Feed quality and composition meet the standards of the New Zealand Feed Manufacturers Association *Manufacture of Animal Feeds in New Zealand Code of Practice*
- Feed particle size is appropriate for the age and size of the hens
- Flock growth rates are monitored regularly, for example by representative samples of hens in each shed and age group being weighed on a regular basis
- Corrective action is taken if the average sample weight is more than 2% less than the previous weighing (information on weights for breeds of hens can be obtained from breeding companies or avian veterinary services)
- Linear feeders provide at least 10cm of space per hen or circular feeders provide at least 4cm of space per hen
- Continuous drinking troughs provide at least 2.5cm of space per hen or circular drinking troughs provide at least 1cm of space per hen
- Hens in cages have access to at least two nipples or cups. In other housing systems a minimum of 1 bell per 100 hens or 1 nipple or cup per 10 hens is provided
- Water derived from sources not subject to local authority control is shown to be potable and tested for microbiological contamination or as required under a Risk Management Programme
- Daily feed and water intakes align with breeder recommendations for age of stock
- Feed nutrients are checked promptly if hens display negative behaviours (e.g. injurious feather pecking, cannibalism)
- Operation of feeding and watering equipment is monitored daily and corrective action is taken promptly and documented
- A reserve supply of feed and water is maintained on site, sufficient for the maximum hen capacity for at least 72 hours in case of an emergency

3 Shelter and Shade

- All hens must have access to shelter from adverse weather that is likely to cause heat or cold stress, and to minimise the risk of predation.
- If openings to the outdoor area or winter garden are provided, they must be designed to minimise the adverse effects of the weather on the hens and on the quality of litter.

Example indicators for Minimum Standard No. 3 Shelter and Shade

- Hens do not show signs of heat stress (panting, wings outstretched) or cold stress (huddling)
- Protection from predators is provided
- Overhead shade or shelter is provided on the range at all times throughout the year in a manner that encourages full use of the range
- Windbreaks are evident in exposed areas on the range
- The openings to the outside are sheltered from the weather and the litter around the openings is in good condition

4 Housing and Equipment Design, Construction and Maintenance

- Housing systems and equipment, including shelters used outside and mechanical equipment, must be designed, constructed and maintained to avoid injury, disease or harm to layer hens.
- Housing systems must be sited to facilitate drainage of storm water away from buildings and to minimise risks posed by natural and environmental hazards.
- Precautions must be taken to secure the site and buildings against unauthorised entry of people, to protect the health and welfare of the hens.
- Measures must be taken to control pests in and around hen housing and shelters.
- Controlled environment housing must have alarms that warn of power failure and/or significant temperature variance.
- Housing systems, with the exception of cages, must provide facilities for roosting (e.g. perches), a surface for pecking and scratching, and a secluded nesting area.
- All housing systems must be designed to allow hens to maintain a natural posture throughout.
- The design, size and maintenance of the openings and doors of housing systems must be such that hens can be placed in or removed from them without injury or distress.
- The following specific design requirements apply:
 - Barns:
 - Secluded nest areas must be provided and must be of adequate size and number to meet the laying needs of all hens, and ensure hens can lay without undue competition.
 - The floor of the nest area must be covered with a suitable substrate that prevents direct contact of hens with a wire mesh floor.
 - Perching areas must be provided and designed to allow the hen to grip without risk of trapping its claws and must allow all birds to perch at the same time.
 - Perches must be placed to prevent the fouling of hens or their food on lower levels and of a height that allows hens to use them easily and without risk of injury.
 - Any slatted, wire or perforated floors must be constructed to support the forward facing claws.
 - In multi-tier systems the distance between the levels must be at least 45cm and the levels must be arranged so that the layer hens in the lower tiers are protected from excreta from above.
 - All hens must have access to good quality friable litter at all times to allow them to scratch and forage.
 - If openings to the outdoor area of winter garden are provided, they must be at least 35cm high and 40cm wide, and evenly distributed along the building, to allow hens free access without risk of smothering or injury.

- If openings to the outdoor area or winter garden are provided, they must be designed to minimise the adverse effects of the weather on the hens and on the quality of the litter.

Example indicators for Minimum Standard No. 4 Housing and Equipment Design, Construction and Maintenance

- All birds can be inspected with ease (i.e. there is good access to all birds and sufficient lighting)
- Provisions are in place to control personnel accessing the premises
- Pest control is implemented and documented
- Environmental parameters of the housing system are in accordance with the Minimum Standards for Lighting, Ventilation, and Temperature
- Operation of equipment is monitored daily and corrective action is taken promptly and documented
- There is documented evidence of routine cleaning of the facilities and equipment so that transmissible diseases/parasites are avoided or managed
- There is documented evidence that alarms have been checked and tested at least monthly and problems immediately rectified
- There is documented evidence of preventative maintenance in place for facilities and equipment
- Fail-safe flaps are fitted to fans, outlets and inlets to enable natural ventilation
- Wire nest floors are covered by a suitable substrate e.g. plastic matting, artificial turf or straw
- Perches are of a design and construction (including height and spacing) that minimises injury (such as keel damage) or ill-health (such as foot problems) or vent pecking
- 95% of all eggs are laid in the nesting areas
- Scratch pad area is sufficient to allow all birds to exhibit foraging behaviour
- Perches provide at least 15cm of space per hen
- If a raised slatted floor is used for perching, the slatted area is at least 1/3 of the internal living space
- In barns, at least 1 nest is provided per 7 hens or, for group nests, at least 1m² of nesting space is provided per 120 hens
- In barns, at least 250cm² of litter/hen is provided and the litter occupies at least one-third of the ground area to encourage pecking, scratching and dust bathing behaviours
- Hens with outdoor access make regular use of the range
- Any failure or fault in housing or equipment (e.g. damaged flooring) is documented and immediately rectified

5 Contingency Planning

- Persons in charge of layer hens must have contingency plans to address any event which could result in a potentially significant welfare impact on the hens.
- Alternative means of maintaining ongoing environmental control and provision of food and water must be available in case of emergencies, including power or computer failure or mechanical breakdown.
- Appropriate fire prevention measures and a documented emergency plan must be in place.

Example indicators for Minimum Standard No. 5 Contingency Planning

- A written contingency plan, covering potential adverse events, such as those affecting food and water supply, environmental conditions, and housing is available for inspection, and staff are trained to implement it
- Alternative arrangements are in place in case of equipment or supply failure to ensure hens receive their daily requirements of feed and water, and that temperature and air quality are maintained
- An alarm system indicates the event of any power or computer failure
- All alarm systems, fire fighting equipment and emergency power supply are tested regularly and test results documented

Example indicators for Minimum Standard No. 8 Ventilation

- Hens do not display any signs of discomfort, distress or disease (e.g. panting and wing stretching if hot, huddling if cold, sneezing)
- Hens do not have any eye or nasal irritation indicative of ammonia level over 20ppm or other air quality problems

The Minimum Standards and Example Indicators shown here are for barn production systems with or without access to an outdoor area. (Barns with access to the outdoors are usually referred to as free-range systems). All Minimum Standards except 11 (Range Management) apply to hens housed in barns. Minimum Standard 11 applies only to layer hens with outdoor access.

6 Stocking Densities

- Stocking densities or space per pullet (7-18 weeks of age):
 - must not exceed 14 pullets per m² for those reared in barns.
- Stocking densities or space per layer hen (19 weeks of age or older):
 - must not exceed 7 hens per m² for barns with no outdoor access.
 - Must not exceed 9 hens per m² for within barns with outdoor access.
- Stocking of the outdoor ranging area must not exceed 2,500 hens per hectare.

Example indicators for Minimum Standard No. 6 Stocking Densities

- Distribution and behaviour of hens using all facilities is monitored and recorded on a regular basis
- Hens are not displaying symptoms of overcrowding, such as excessive pecking or distress calls
- The majority of hens with access outdoors are observed to use the outside range

7 Lighting

- Chicks must be provided with light of at least 50 lux for at least the first 7 days so they can easily locate food and water.
- Chicks and pullets housed under artificial light must be exposed to short periods of darkness after placement, in order to train them to blackout conditions should lighting fail.
- After the training period, where hens are housed in artificial light, lighting schedules must provide a minimum of eight hours of continuous darkness in each 24-hour period.
- Lighting levels during the light phase must not be lower than 20 lux at ground level so that hens can see each other and their surroundings.
- Light levels during inspections must be sufficient to stimulate activity of the hens and allow hens and equipment to be clearly visible.
- Where hens are housed under artificial light, the light intensity must be raised and lowered gradually over a 15-minute period to give them sufficient time to roost and come off perches without causing injury.

Example indicators for Minimum Standard No. 7 Lighting

- Light control systems are working and are well maintained
- Light levels during inspection are sufficient to ensure that all hens in all parts of the house are clearly visible, including at all times in multi-tier systems
- Natural and artificial lighting is evenly distributed to facilitate the distribution of the hens over the floor area and avoid overcrowding
- Light levels during the light period are at least 20 lux at hen level
- There are no injuries caused by changes in the light intensity

8 Ventilation

- Ventilation of housing systems must be sufficient to prevent the build-up of heat, humidity, dust or noxious gases to levels that are harmful to hen health or that cause pain or distress to hens.
- Immediate remedial action must be taken if ammonia levels greater than 20ppm are detected at hen level, or if hens exhibit signs of heat stress, respiratory distress or distress from humidity, dust or noxious gases.

Example indicators for Minimum Standard No. 11 Range Management

- Hens with access outdoors are observed to use the outside range frequently
- There is minimal evidence of pugging, standing water and muddy, dusty or contaminated conditions
- The area immediately around the barn is managed to keep hens' feet clean
- The range is free of poisonous plants and contaminants
- A system of range rotation is in place that takes account of the type of soil, drainage and flock size
- Measures to prevent parasite build-up on the range are in place
- Vegetation on the range is maintained in good condition and nutrient build-up is managed
- Access to/from the outdoor area is not blocked

9 Temperature

- Temperatures inside housing must be maintained within a range compatible with good health and welfare of the hens.
- When chickens show signs of being too cold or too hot, remedial action must be taken immediately.
- The brooder area for newly placed chicks must be preheated and the temperature maintained at a level that promotes good chick health and welfare.

Example indicators for Minimum Standard No. 9 Temperature

- Temperature at the level of the hens is within the temperature range specified in the breeding company guidelines, as appropriate for the age and breed of the hens
- Corrective action is taken if signs of stress (sneezing, prolonged panting and wing extension due to heat or huddling due to cold) are observed during daily inspection
- Temperature and hen behaviour is monitored more frequently when ambient temperatures are extreme and corrective action is taken if required
- Chick behaviour and distribution within the brooding area is monitored and remedial action is taken as required

10 Litter Management in Barns

- Litter material must be of good quality, friable and free from toxic contaminants.
- Litter condition must be managed to avoid levels of dustiness or dampness that leg, respiratory or other health problems such as the build-up of parasites or diseases.

Example indicators for Minimum Standard No. 10 Litter Management

- Most hens show scratching, foraging and dust bathing behaviour
- Plumage and feet of hens are in good condition and are monitored regularly
- Litter is inspected regularly for signs of caking or greasiness and remedial action taken
- Litter is obtained from reputable sources and visually inspected before use
- If wood shavings are used they are dry, from non-treated timber and free from toxic contamination
- Drinkers are managed to avoid leaks or spillage leading to wet litter

11 Range Management

- The outdoor area must be managed actively to ensure that the ground conditions and vegetation are not harmful to the health and welfare of the hens.
- The area immediately around the barn must be managed to prevent the ground becoming wet and muddy, to keep the hens' feet clean and minimise parasite build-up in this area.
- A range management plan must be in place that addresses pasture quality, vegetation and control of parasites and diseases.
- Access to the range must be available during daylight hours unless prevented by bad weather or on veterinary advice.

Example indicators for Minimum Standard No. 11 Range Management

- Hens with access outdoors are observed to use the outside range frequently
- There is minimal evidence of pugging, standing water and muddy, dusty or contaminated conditions
- The area immediately around the barn is managed to keep hens' feet clean
- The range is free of poisonous plants and contaminants
- A system of range rotation is in place that takes account of the type of soil, drainage and flock size
- Measures to prevent parasite build-up on the range are in place
- Vegetation on the range is maintained in good condition and nutrient build-up is managed
- Access to/from the outdoor area is not blocked

12 Behaviour

- Hens must have the opportunity to express a range of normal behaviours. These include, but are not limited to nesting, perching, scratching, ground pecking and dust bathing.
- Any housing systems installed after the date of issue of this Code must meet the requirements of Minimum Standard 12(a).

Example indicators for Minimum Standard No.12 Behaviour

- Layer hens are active and alert, calm, confident and inquisitive
- Layer hen behaviour is monitored and timely remedial action is taken when appropriate, including managing the effects of injurious pecking
- Layer hens show types and frequencies of activities that are normal for their age

13 Handling and Catching

- Layer hens must be handled in a manner that minimises pain and distress and does not cause injury.
- Layer hens, except day-old chicks, must not be picked up or suspended by one leg, the wings or the neck.
- The stress of handling, especially at depopulation, must be minimised by appropriate design of the facilities.
- All members of catching teams must be trained in the handling of layer hens, and a nominated member of the catching team must be responsible for supervising, monitoring, and maintaining welfare standards throughout the catching process.
- A handler must not carry more than four birds in each hand.
- Hens that are injured before or during the catching procedure must be humanely destroyed immediately.

Example indicators for Minimum Standard No. 13 Handling and Catching

- No injuries attributable to handling occur
- Where chicks are moved on conveyor belts, the maximum height between consecutive conveyor belts does not exceed 40cm
- Any chicks that fall on the floor are picked up immediately
- There is evidence of training for catching crews
- Any injured or unfit hens identified during the catching process are immediately and humanely destroyed
- A documented depopulation action plan is completed by the farm manager
- Documented record of nominated supervisor is evident

14 Loading and Transport

- All hens, including chicks, selected for transport must be examined by the person in charge prior to loading to ensure they are fit for transport and are able to withstand the journey without suffering unreasonable or unnecessary pain or distress.
- Persons responsible for the loading and transport of hens must be trained in careful handling procedures and understand the effects poor transport conditions may have on the welfare of the hen.
- Hens must be placed in transport crates gently and in a manner that allows them to rapidly regain an upright position.
- Day-old chicks must be held and transported in conditions of controlled temperature and airflow.
- Crates and containers must be constructed to ensure there are no hazards likely to cause injury to the hens.

Example indicators for Minimum Standard No. 14 Loading and Transport

- There are documented records of hens injured or dead on arrival
- Hens are transported in an upright sitting position
- Hen transport crates are a minimum of at least 22cm height of 10cm and have a minimum floor space of 25cm² per chick
- Ventilation and stocking rate during transport are controlled according to weather and hen condition (e.g. weight, health and feather status)
- The temperature during transport within a container is within 8 to 26°C for laying hens and 24 to 31°C for day-old chicks and there is no evidence of panting or huddling and shivering in hens
- There is a documented training record for loading and transport crews
- A documented contingency plan is evident
- Chicks are delivered to the place where they will be reared as soon as possible after hatching
- Compliance with *Animal Welfare (Transport within New Zealand) Code of Welfare* is evident

- Conveyances and containers must have sufficient ventilation, even when stationary, to prevent harmful concentrations of gases or water vapour, and protect the hens from climatic conditions that would compromise their welfare.
- A contingency plan must be in place to address potential transport problems. Drivers of vehicles must be properly briefed on the contingency plan.

Example indicators for Minimum Standard No. 14 Loading and Transport

- There are documented records of hens injured or dead on arrival
- Hens are transported in an upright sitting position
- Hen transport crates are a minimum of at least 22cm height of 10cm and have a minimum floor space of 25cm² per chick
- Ventilation and stocking rate during transport are controlled according to weather and hen condition (e.g. weight, health and feather status)
- The temperature during transport within a container is within 8 to 26°C for laying hens and 24 to 31°C for day-old chicks and there is no evidence of panting or huddling and shivering in hens
- There is a documented training record for loading and transport crews
- A documented contingency plan is evident
- Chicks are delivered to the place where they will be reared as soon as possible after hatching
- Compliance with *Animal Welfare (Transport within New Zealand) Code of Welfare* is evident

15 Management of Health and Injury

- Every hen must be inspected at least once a day and steps must be taken to address any abnormalities in the flock.
- Mortalities, including culls, must be monitored and recorded and dead hens removed from the flock daily.
- Sick or debilitated hens must be removed and treated or be killed by a humane method as soon as possible.
- Medication must be used only in accordance with registration conditions, manufacturers' instructions or professional advice.
- Hens must not be subjected to induced moulting.
- If the early signs of a disease outbreak are recognised or suspected, or mortalities are greater than expected, appropriate intervention must be undertaken by a suitably qualified person.
- Premises and equipment must be thoroughly cleaned and disinfected before restocking to prevent the carry-over of disease-causing organisms to incoming hens.

Example indicators for Minimum Standard No. 15 Management of Health and Injury

- Dead hens and culls are removed daily and numbers recorded
- Disease outbreaks, health problems and remedial action are documented
- Abnormal conditions are noted, the cause identified and appropriate remedial action taken
- Sick or debilitated hens must be removed to a hospital pen with easy access to feed and clean water and treated
- Regular assessments of the risk of infectious and parasitic diseases are made and appropriate control systems are in place to prevent them
- Persons responsible for the welfare of hens have an understanding of good farm biosecurity measures and adopt them. They also have some knowledge of the signs of notifiable diseases (e.g. Avian Influenza, Newcastle Disease) and what actions they need to take if concerned
- Sufficient inspections are undertaken during which temperature, light levels, availability of feed, feeding systems, water and all parts of the ventilation system are checked, and where problems are encountered, appropriate remedial action is taken to protect the welfare of the hens

16 Beak Tipping

- Beak treatment must only be carried out by competent, trained operators.
- Beak treatment, when undertaken, must be done using an infrared beam within 3 days of hatching.
- The tipping of beaks of individual hens after 3 days of age must only be undertaken in an emergency with veterinary approval and under veterinary supervision to help control outbreaks of cannibalism during the laying period.
- The operator must not remove more than one-quarter of the upper or lower beaks. This means for:
 - one- to 3-day-old chicks, no more than 2mm of the beak;
 - adult hens, no more than the blunting of upper and lower tips.

Example indicators for Minimum Standard No. 16 Beak Treatment

- Infrared treatment is undertaken in accordance with supplier instructions
- Inspection of beaks is undertaken to ensure minimum amount removed
- Staff training records are documented

17 Humane Destruction

- The method(s) used for the humane destruction of layer hens, including unhatched eggs in the last half of incubation and newly hatched chicks, must ensure rapid death, which is confirmed by inspection.
- Persons undertaking humane destruction must be appropriately trained and must ensure that the hens are managed gently and calmly at all stages of the process.
- Any equipment used to undertake humane destruction must be well maintained and not overloaded, so that it operates effectively and efficiently.
- Maceration equipment used for humane destruction must be designed to cause very rapid and complete fragmentation of the egg or day-old chick into small particles.
- When using gas, the procedure must ensure the collapse of every hen within 35 seconds of exposure to the gas. Layer hens must remain in the gas for at least a further two minutes following collapse and be inspected to ensure that they are dead upon removal of the gas.

Example indicators for Minimum Standard No. 17 Humane Destruction

- Humane destruction protocols are documented
- Acceptable methods are used. These include:
 - Electrical stunning followed by neck dislocation and exsanguination
 - Neck dislocation alone
 - Gas using a mixture of inert gases and/or carbon dioxide
 - Immediate fragmentation/maceration for unhatched eggs and day-old chicks
- Any other methods used for humane destruction of hens (referred to in the *OIE Terrestrial Animal Health Code* (<http://www.oie.int/international-standard-setting/terrestrial-code/access-online/>)) are performed under veterinary supervision
- Persons performing humane destruction are appropriately trained and ensure that the hens are managed gently and calmly at all stages of the process
- Appropriate behaviour towards and handling of hens, including chicks, is observed and corrective action taken as required
- All hens killed are inspected following the procedure to confirm death
- Hens are confirmed unconscious within 35 seconds of exposure to gas
- Staff training and supervision is documented and monitored
- Equipment used to perform humane destruction is never overloaded and is well maintained to ensure that it operates efficiently and maintenance is documented