

Meat Chickens

Code of Welfare

1 October 2018

TITLE

Code of Welfare: Meat Chickens

COMMENCEMENT

This Code of Welfare comes into force on 1 October 2018.

REVOCATION

This Code of Welfare revokes and replaces the Animal Welfare (Meat Chickens) Code of Welfare 2012, dated 26 July 2012.

ISSUING AUTHORITY

This Code of Welfare is issued by the Minister of Agriculture, by a notice published in the Gazette, under section 75 and 76 of the Animal Welfare Act 1999, after having complied with the matters specified in section 75(1) and 76(2).

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Introduction

This introduction is not part of the Code of Welfare, but is intended to indicate its general effect.

Purpose

The purpose of this Code is to provide information to the owners and persons in charge of meat chickens about the standards they must achieve in order to meet their obligations under the Animal Welfare Act 1999.

This Code of Welfare encourages all those responsible for meat chickens to adopt the highest standards of husbandry, care and handling, and to equal or exceed the minimum standards.

Adequately maintaining the welfare of meat chickens requires experience, training and the observance of high standards.

Background

The Animal Welfare Act 1999 provides for the welfare of animals in New Zealand. It puts obligations on people who own or are in charge of animals to provide for the welfare of their animals.

The Act establishes the fundamental obligations relating to the care of animals and provides for the development and issue of codes of welfare.

Codes of welfare expand on the basic obligations of the Act by setting minimum standards and recommending best practice for the care and management of animals.

Codes of welfare can also reference regulations issued under the Animal Welfare Act 1999. Regulations are prescribed under the Animal Welfare Act and impose enforceable requirements on owners and persons in charge of animals. Owners and persons in charge of animals are responsible for ensuring that they are aware of and understand all Act and regulatory requirements that are relevant to them.

Who should read this Code of Welfare?

This Code of Welfare is intended for all persons responsible for the welfare of meat chickens.

This Code applies to meat chickens raised for commercial production, regardless of whether they are raised with access to the outdoors or in a fully-housed system.

Under the Act the “owner” and every “person in charge” of an animal are responsible for meeting the legal obligations for the welfare of animals under their care.

For meat chickens, the owner of the animals may place them in the care of others who become the persons in charge, but this does not derogate from their responsibility to ensure that the requirements of the Act are met.

Why is this important?

Failure to meet a minimum standard in this Code may be used as evidence to support a prosecution for an offence under the Act. A person who is charged with an offence against the Act can defend him or herself by showing that he or she has equalled or exceeded the minimum standards in this Code.

This Code of Welfare includes information and example indicators for each minimum standard. The list of indicators is not exhaustive but is given to provide guidance on ways in which a minimum standard may be met.

Owners and persons in charge of animals are not required to comply with the recommendations for best practice in this Code but are encouraged to do so to provide higher standards of welfare.

Legislative background

This Code does not provide an exhaustive list of the Act's requirements, and owners and those in charge of animals should note that they must comply with the minimum standards in this Code and in the general provisions of the Act. A copy of the Act is accessible at: www.legislation.govt.nz.

Other information

Other codes of welfare should be consulted where appropriate (see www.mpi.govt.nz).

Codes of welfare must be accompanied by a report that sets out the deliberations that the National Animal Welfare Advisory Committee (NAWAC) undertook when developing the codes of welfare including the standards and recommendations for best practice, the nature of any significant differences of opinion during drafting and consultation, and any matters that should be dealt with by regulation. Code reports can be accessed online (see www.mpi.govt.nz).

Although efforts to include relevant regulations within each code have been made, there may be other regulations which are relevant to you. The full list of all animal welfare regulations should be consulted where appropriate (see www.legislation.govt.nz).

Part 1: General Requirements

1.1 Application

This Code applies to all persons responsible for the welfare of meat chickens. This includes people in day-to-day charge of meat chickens, as well as the companies that own the meat chickens and hatcheries.

The coverage of this Code extends from the pre hatched in-shell chick in the last half of development to the catching and transport of chickens to the processing plant for slaughter.

This Code does not apply to meat chicken breeder birds. The genetic selection of meat chicken stock in order to improve the welfare of meat chicken grower birds is important and is intended to be covered in a future code of welfare for meat chicken breeders.

The majority of meat chickens are produced by vertically integrated companies in which the ownership of the chickens is retained by the company and the rearing of the chickens from day-old chicks to market weight is undertaken by persons contracted to the company.

Responsibility for meeting the minimum standards relating to the provision, design and maintenance of the rearing facilities and equipment, the allocation of operational responsibilities and the competence and supervision of performance of employees lies with the contractor who is the “person in charge” for the purposes of the Act. Responsibility for meeting minimum standards during operation of particular tasks lies with the person responsible for carrying out that particular task, being the “person in charge” of the animals at that particular point in time. In practice, the identification of the person in charge will depend on the minimum standard in question.

Meat chicken companies, as owners of the chickens, are also responsible under the Act for ensuring that the welfare needs of the meat chickens are met. To assist with this role, recommendations for quality assurance (QA) schemes are made in Part 9: Welfare Assurance System. Although meat chicken companies may place the meat chickens under someone else’s care and management, this does not derogate from their responsibilities under the Act. Meat chicken companies, as owners of the chickens and suppliers of day-old chicks, have an overarching responsibility to manage factors which may affect the welfare of the chickens. Where meat chicken companies formulate, manufacture and supply feed or provide advisory services, the owners are responsible for ensuring that supplies or services do not compromise the welfare of the meat chickens.

1.2 Interpretation and Definitions

Refer to Schedule I: Interpretation and Definitions.

Part 2: Stockmanship

Introduction

The importance of good stockmanship cannot be overemphasised. It is the most important determinant of good animal welfare. The knowledge, skills, abilities and attitude of the stock handlers are integral to the standard of welfare experienced by meat chickens. Stockmanship includes the ability to identify a chicken's needs and ensure that action is taken to address those needs in a way that demonstrates an affinity with and empathy for chickens.

Regardless of the production system employed, there will be inherent problems and particular welfare risks that the stock handler needs to manage for the benefit of the chickens. Familiarity with the risks that are characteristic of the production system in which they work is an important aspect of stockmanship.

Those responsible for the care of meat chickens need to be competent and well trained. Appropriate training for staff on the care and maintenance of meat chickens, and effective implementation of this training, can significantly influence the welfare of meat chickens. Knowledge of the normal appearance, needs and behaviour of meat chickens is essential for monitoring their health and welfare. It is important that those in charge of meat chickens are able to recognise early signs of distress, disease or aberrant behaviours so that prompt action is taken or advice sought.

Owners, managers or persons in charge are required to ensure that their staff have either the relevant knowledge and training, or appropriate supervision and support, to ensure that the health and welfare needs of the meat chickens in their care are met. Training can be provided either formally, by the completion of specific courses focusing on the care and management of meat chickens, or on the job, by experienced supervisors. It is important to ensure that all staff, including contract or temporary staff, are trained and competent in their relevant tasks.

Minimum Standard No. 1 – Stockmanship
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Meat chickens must be cared for by personnel who collectively possess the ability, knowledge and competence necessary to maintain the health and welfare of the chickens in accordance with this Code.
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Example indicators for Minimum Standard No. 1 – Stockmanship

- Meat chicken health and welfare is in accordance with the minimum standards listed in this Code
- Those caring for and handling meat chickens are familiar with the minimum standards listed in the Code and a copy of the minimum standards is available on site at all times
- Job descriptions and/or other documentation outlining the expectations of personnel and their performance are readily accessible and include reference to chicken health and welfare
- All staff have received training or have suitable practical experience and demonstrate competence by appropriate responses to chickens and their needs
- A sufficient number of personnel is available in order to meet the requirements of this Code.

Recommended Best Practice

- a) Persons involved in the farming of meat chickens should receive training from accredited training providers.

General Information

Information on qualifications and accredited training providers is available from meat chicken companies, the Poultry Industry Association of New Zealand (www.pianz.org.nz) and Agriculture ITO (www.agito.ac.nz).

The appropriate number of personnel to care for meat chickens depends on a number of factors, including the number of chickens, the design of the system, the age of the chickens, and the facilities and equipment available within the system.

Part 3: Food and Water

Introduction

Food and water are essential for maintaining good standards of meat chicken welfare. Nutrient composition, feed availability, quantity of feed, absence of contaminants within the feed and water, and access to the feeders and drinkers are all important parameters. Requirements for the quality and composition of feed manufactured for meat chickens are mandated under the Agricultural Compounds and Veterinary Medicines Act 1997. See also Part 7: Disease and Injury Control for management of disease related to nutrition.

Minimum Standard No. 2 – Food and Water

- (a) All meat chickens must receive adequate quantities of food and nutrients each day to enable each chicken to:
 - i) maintain good health;
 - ii) meet its physiological demands; and
 - iii) minimise metabolic and nutritional disorders.
- (b) All meat chickens must have continuous access to water that is palatable and not harmful to health.
- (c) Feed and water must be provided in such a way as to prevent undue competition and injury.
- (d) Any meat chicken that cannot access food and water adequately must be removed during daily inspections and raised separately or humanely destroyed immediately.

Example Indicators for Minimum Standard No. 2 – Food and Water

- Daily inspection is carried out to ensure that undue competition and injuries are minimised and corrective action is taken and documented as required. Deaths and cull numbers (and reasons where available) are recorded
- Feed quality and composition meet the standards of the New Zealand Feed Manufacturers Association *Manufacture of Animal Feeds Code of Practice*
- The pellet and/or crumb size is appropriate for the size of the chickens
- Representative samples (minimum 0.5%) of the flock are weighed weekly and the weights recorded and compared against a growth chart appropriate for their breed and management systems, issued by the poultry breeding companies in New Zealand
- Appropriate advisory livestock personnel are consulted promptly if the sample growth rate varies by 10% or more from the expected growth chart
- Chicken growth and behaviour is not adversely affected by feed changes
- Uncontrolled water sources are routinely monitored for microbiological and mineral content, quality and palatability. The required frequency of monitoring will depend on the source
- Water consumption is monitored on a daily basis and per cycle
- If the mortality level within a shed exceeds 1% in a 24 hour period, an investigation is undertaken and documented

Recommended Best Practice

- a) Any changes in the type, quantity and makeup of feed should be introduced gradually.

General Information

Food quality and composition relevant to the age of the chicken is a key factor in meat chicken welfare. Regular monitoring of food quality commencing at the point of manufacture and on farm, measurement of water consumption and litter condition, can provide an early warning of sudden changes in the performance, health and condition of the meat chickens.

Part 4: Shelter and Facilities

4.1 Shelter for Meat Chickens Outdoors

Introduction

Some management systems provide meat chickens with access to outside areas. Chickens may be fearful of wide open spaces, so by providing and managing the shade and shelter in the outdoor area, chickens are encouraged to use the outdoor area and display a wider range of natural behaviours. Shelter outdoors includes natural vegetation and/or artificial structures that provide chickens with a sense of security from predation and protection from adverse weather conditions. Whether the chickens use the outside area will depend on the type of shelter and the state of the outdoor area.

Maintenance of good conditions outdoors is essential for the health and welfare of meat chickens. If the area is not managed appropriately, pugging, free standing water, mud, dust and contaminants can affect chicken welfare.

Minimum Standard No. 3 – Shelter for Meat Chickens Outdoors

- (a) All meat chickens must have access to shelter from adverse weather that is likely to cause heat or cold stress, and to reduce the risk of predation.
- (b) Openings provided for chickens to access an outside area must be wide enough to enable chickens to freely move to and from the outdoors at all times without the risk of smothering or injury.
- (c) Where access to outside areas is provided it must be managed to prevent the development around the housing of muddy, dusty or contaminated conditions to an extent that could be harmful to the chickens' health.
- (d) Precautions must be taken to protect chickens from pests, including predators.

Example Indicators for Minimum Standard No. 3 – Shelter for Meat Chickens Outdoors

- Chickens are observed to use the outside area regularly
- Number and location of popholes is appropriate for the number of chickens, as determined by use of the outside area by majority of chickens, and minimal competition at popholes
- Each pophole is of sufficient size to allow the passage of more than one chicken at any one time. A suitable minimum dimension is 350 mm high and 400 mm wide
- 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
- Minimal pugging or standing water is evident
- Minimal muddy, dusty and contaminated conditions exist
- A pest management plan is followed
- A management plan is followed that covers the management of:
 - vegetation cover on the ground
 - ground condition
 - risk of disease
 - drainage, and
 - shelter and shade

Recommended Best Practice

- a) Tree and shrub cover should be provided to encourage ranging behaviour and provide shelter and shade.

- b) Enhancement of the outside area e.g. trees, shrubs, covered shelters, straw bales should be used to encourage chickens to move away from the popholes and house perimeter.
- c) Chickens should be accustomed to the outdoors once they are fully-feathered to encourage ranging activity.

4.2 Housing and Equipment

Introduction

Provision of housing and facilities that are appropriately designed, constructed and maintained is essential for the health and welfare of all meat chickens, but particularly those that are fully-housed. Appropriate shed design and maintenance contributes to the maintenance of effective biosecurity standards which, in turn, are necessary to ensure high levels of animal welfare.

Minimum Standard No. 4 – Housing and Equipment

- (a) Precautions must be taken to secure the site and buildings at all times in order to protect the health and welfare of meat chickens.
- (b) Meat chicken sheds must be designed, constructed and maintained to:
 - i) provide insulation, ventilation, heating, lighting, sanitation and hygiene requirements (see Section 4.4: Management of the Internal Environment); and
 - ii) allow ready access for handling and inspection of meat chickens; and
 - iii) have sufficient height, width and space and entrance size to allow for catching methods that minimise stress on meat chickens; and
 - iv) allow the distribution of chickens over the floor to be controlled so as to keep chicks within the heated area and prevent crowding of older chickens.
- (c) All surfaces in meat chicken sheds and enclosures must be designed, constructed and maintained to:
 - i) minimise the risk of injury and disease to meat chickens; and
 - ii) facilitate cleaning and disinfection of the shed surfaces.
- (d) All equipment used for rearing meat chickens must be inspected regularly throughout the day to ensure correct operational functions, and if required appropriate remedial action undertaken.
- (e) Meat chicken sheds must be subject to a pest (e.g. wild birds, mustelids, rodents) control plan.
- (f) All meat chicken sheds must be sited to minimise risks of natural and environmental hazards such as storm water drainage, extreme winds and to allow for appropriate management of dust.
- (g) Controlled environment housing must have alarms that warn of power failure and/or significant temperature variance.

Example Indicators for Minimum Standard No. 4 – Housing and Equipment

- Access to the premises is controlled and visitor access is recorded
- Injury to chickens is prevented through, for example, removal of damaged equipment, sharp wire or metal edges
- Chicken distribution and behaviour is monitored during daily inspections and corrective action is taken to adjust light, temperature or ventilation as required
- The operation of automatic equipment is monitored at least four times each day
- If chicken health and welfare is compromised by equipment failure then corrective action is taken promptly and documented
- Control of pests that may cause a biosecurity risk, or fear, distress or injury to chickens, is achieved through an appropriate and documented pest control programme
- All alarm systems, fire fighting equipment and emergency power supplies are tested regularly and test results documented

Recommended Best Practice

- a) When new buildings are planned, existing buildings modified or equipment purchased, advice on aspects that can affect welfare should be sought from suitably qualified and experienced persons.
- b) A service annex should be provided in addition to the meat chicken shed to facilitate control of access and delivery of goods so as to minimise disturbance to the chickens and avoid sudden changes in light, temperature and humidity.

4.3 Contingency Planning

Introduction

The provision and efficient operation of a suitable environment in sheds is often reliant on technology. Adverse events caused by climatic events or natural disasters that disrupt the shed or technology can affect the welfare of fit and healthy chickens, but have a greater impact on those more vulnerable because of their age (e.g. chicks). It is every person's and organisation's responsibility to include planning for the welfare of their chickens in their contingency plans.

Minimum Standard No. 5 – Contingency Planning

- (a) Persons in charge of chickens must have contingency plans to address events such as delays in transport and plant breakdown. Drivers of conveyances must be properly briefed on any contingency plan in place.
- (b) 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.
- (c) Appropriate fire prevention measures and a fire emergency plan must be in place.

Example Indicators for Minimum Standard No. 5 – Contingency Planning

- A written contingency plan, covering catching, loading and transport is available for inspection
- Alternative arrangements are in place in case of equipment or supply failure to ensure chickens receive their daily requirements of feed and water and temperature and air quality are maintained
- An alarm system indicates any power or computer failure
- All alarm systems, firefighting equipment and emergency power supply are tested regularly and test results documented
- The emergency plan is documented and staff are trained to implement it.

General Information

Further information on preparing for emergencies and adverse events may be obtained by referring to the MPI website at www.mpi.govt.nz/protection-and-response/responding/adverse-events/.

4.4 Management of the Internal Environment

4.4.1 Lighting

Introduction

Lighting is a key part of the physical environment that can affect the welfare of meat chickens. The light intensity, duration of light and dark periods, the pattern of light and dark and the uniformity of light across the floor area are all important. Uniform lighting encourages uniform distribution of the chickens across the shed.

Lighting is normally brighter and near-constant for three to four days after placement of chicks in the brooding area, to allow them to find food and water. After the first four days various lighting patterns are introduced, depending on the facility. The lighting programme may mimic a normal day e.g. 16 hours light and eight hours dark or may be intermittent and supply alternate periods of light and dark throughout a 24-hour period to optimise growth. Providing a dark period is important for chicken welfare so chickens can show normal patterns of behaviour and in particular sleep and rest adequately.

Minimum Standard No. 6 - Lighting

- (a) Lighting intensity for the first four days after placement of the chicks in the brooding area must be sufficient to enable the chicks to learn the locations of food and water. This four day training period must include at least one hour of continuous darkness each day, to accustom the meat chickens to blackout conditions and to prevent panic should lighting fail.
- (b) After the training period described in (a) above, lighting patterns must encourage activity and provide a minimum period of darkness each day to ensure adequate rest in chickens, such that:
 - i) if only four hours of darkness is provided it must be continuous;
 - ii) if more than four hours of darkness is provided, each dark period must be a minimum of three continuous hours.
- (c) Lighting levels during the lights-on period must allow the chickens to see one another and to visually inspect their surroundings.
- (d) Lighting levels during inspections must be sufficient to stimulate activity of the chickens and allow chickens and equipment to be inspected.

Example Indicators for Minimum Standard No. 6 – Lighting

- Chicks are exposed to at least one hour of continuous blackout per day for no more than four days after being placed in the brooding area
- Light intensity for chicks for the first four days after placement is at least 50 lux
- After the first four days of placement, natural and/or artificial light intensity at chicken head height is at least 20 lux
- Light levels during inspection are sufficient to ensure that all chickens and equipment in all parts of the house are clearly visible
- Chickens are distributed evenly across the floor
- The lighting pattern(s) are documented (number and duration of light and dark periods)

Recommended Best Practice

- a) Lighting should be dimmed gradually at lights off and increased gradually at lights on, to allow chickens to adjust to different light intensities.
- b) Lighting pattern should mimic natural conditions, i.e. have more than four hours of continuous darkness.
- c) Light intensity at chicken head height should be at least 50 lux.

General Information

As a guide, 50 lux is sufficient light to read a newspaper at arm's length.

4.4.2 Ventilation

Introduction

Ventilation is required to provide fresh air, and to assist in the control of temperature, moisture, noxious gases, airborne particles and litter quality. The accumulation of water vapour, heat, noxious gases (ammonia, carbon dioxide, carbon monoxide, methane) and dust particles may cause discomfort or distress to the

chickens and predispose them to the development of disease and skin problems. Provision of adequate ventilation, control of temperature and humidity and litter management are all interrelated and need to be monitored and controlled.

Air humidity can be influenced by both external ambient conditions and internal factors within the meat chicken shed. Examples of factors that can govern humidity are stocking density, liveweight of the chickens, ventilation rate, indoor temperature, water consumption, malfunction of technical equipment and litter quality.

High ammonia concentrations are more likely to occur in periods of high humidity such as winter and early morning periods and may reduce feed intake, irritate mucus membranes, cause air sac lesions and keratoconjunctivitis. They also reduce foraging, preening and resting behaviours.

Dust is a potentially harmful air contaminant, mainly in combination with ammonia and other gases and may directly affect the respiratory tracts of the chickens, as well as act in the transmission of bacterial and viral infections. Chickens will respond to excessive dust by coughing and sneezing, and may show crusting around the eyes and nostrils.

Minimum Standard No. 7 – Ventilation

- (a) Adequate ventilation must be provided in order to prevent the build-up of heat, humidity, dust and noxious gases to levels that are harmful to chicken health or that cause pain or distress to chickens.
- (b) Immediate and appropriate action must be taken to reduce ammonia levels if they exceed 20 ppm at chicken head height.

Example Indicators for Minimum Standard No. 7 – Ventilation

- During daily inspections minimal signs of discomfort, distress or disease (e.g. panting and wing stretching if hot, huddling if cold, sneezing, drowsiness) are observed
- Chickens are distributed evenly over the floor
- Corrective action taken if ammonia is higher than 20 ppm is documented
- Temperature and humidity are monitored and recorded
- Eye irritation due to ammonia is not experienced by either chickens or operators
- Dust levels do not cause discomfort to chickens or operators

Recommended Best Practice

- a) Dust levels should be kept to a minimum by maintaining appropriate ventilation and humidity levels and appropriate litter management.
- b) Ammonia levels should be maintained at less than 10 ppm at chicken level.

General Information

As a guide to the level of ammonia within the meat chicken shed, 10-15ppm of ammonia in the air can be detected by smell and an ammonia level over 20 ppm will cause eye and nasal irritation in people. Signs of discomfort in chickens from ammonia include rubbing of the eyes, a slight discharge of tears, loss of appetite and reduced growth.

4.4.3 Temperature

Introduction

Temperature requirements for meat chickens vary considerably from day-old to collection for slaughter and all production systems need to be able to meet the changing requirements of meat chickens over time.

Newly hatched chicks have a reduced capacity to maintain adequate body temperatures and thus additional heat input is required to maintain the temperature of the brooding area around 30°C plus. Thereafter, temperature can be progressively reduced to provide a comfort level for the chicken appropriate to its age.

Thermal stress in chickens is related to both temperature and humidity. As temperatures increase, meat chickens will seek shelter (if outdoors), pant with mouth breathing through a wide open beak, stand with wings outstretched, space themselves further apart in sheds, increase water intake and decrease feed intake. High humidity and stagnant air aggravate heat stress.

As temperatures decrease chickens huddle and may make more noise. Older chickens will consume more feed to maintain body temperature. Low temperatures can be fatal for chicks but are generally tolerated better by chickens with larger body size.

Minimum Standard No. 8 – Temperature

- (a) Temperature in sheds must be maintained within a range that ensures good health and welfare of the chickens.
- (b) Where evidence of temperature-induced distress is observed, remedial action must be taken immediately to rectify ambient temperature and mitigate effects on chickens.
- (c) The brooder areas must be pre-heated before placement of chicks and the temperature maintained at a level that promotes good chick health and welfare.

Example Indicators for Minimum Standard No 8 – Temperature

- Ambient temperature at the level of the chickens is measured and recorded on a continuous basis, is appropriate for the age of the chicken and follows meat chicken company guidelines
- Chicken behaviour is monitored at least once per day (or more often when ambient external temperatures are greater than 30°C). Corrective action is taken if signs of stress (sneezing, prolonged panting and wing extension due to heat or huddling due to cold) are observed
- Chickens are evenly distributed across the shed floor

General Information

Where high temperatures are causing distress, roof sprinklers, fans, foggers, cooling pads or other systems can be used to control heat build up within buildings, with humidity monitored if foggers are used.

4.4.4 Litter Management

Introduction

Key features of litter management are control of the quality of the litter used, moisture, dust, ammonia production, caking, bedding thickness and fungal proliferation. The optimum depth of litter depends on the choice of litter material.

There is a close relationship between maintaining litter in good condition and the management of air quality in the shed. Dust and dampness can cause diseases such as hock burn and respiratory disorders. In turn, the stocking density compatible with acceptable welfare of the chickens is dependent on the good management of all environmental factors.

Minimum Standard No. 9 – Litter Management

- (a) Litter must be of good quality material, friable, and with minimal risk of toxic agent contamination.
- (b) Meat chicken shed floors must be completely covered with litter.
- (c) Litter must be managed to avoid levels of dustiness or dampness sufficient to cause leg, respiratory or other health problems.

Example Indicators for Minimum Standard No. 9 – Litter Management

- Daily inspections are performed to detect excessive dustiness, excessive moisture, localised wetness due to leaking drinkers and other water ingress, caking and ammonia production.
- Corrective action is taken as necessary
- Chickens are clean
- Litter is actively managed to minimise contact dermatitis (footpad, breast and hocks) and respiratory problems. Where the incidence of severe footpad lesions or hock burn is higher than 2%, remedial action is taken to resolve the problem and prevent it occurring again
- Where the number of culls for lameness is higher than 0.3%, or is higher than that expected for the age and strain of the chickens, remedial action is taken to resolve the problem and prevent it occurring again
- An assurance programme is in place to ensure that the litter is good quality, is friable and that the presence of toxic agents is minimised

Note: The industry should establish a cleanliness score scale and footpad dermatitis and hock burn score scales to help producers set 'remedial action' levels which will result in welfare and productivity improvements.

Recommended Best Practice

- a) Litter should be completely changed with each new batch of chickens.

4.4.5 Stocking Densities

Introduction

The stocking density that can be achieved without compromising welfare of meat chickens is largely dictated by the quality of the environment, stockmanship and management factors both indoors and outdoors. In circumstances where air or litter quality is sub-optimal, it may be necessary to reduce stocking density in sheds in order to bring these factors under control and thus reduce the risks to chicken welfare. Similarly, the condition of the outdoor area may influence stocking density. The physical condition and the behaviour (especially activity, and feeding and drinking behaviour, and the extent of competition around feeders and drinkers) of the chickens is the ultimate reflection of appropriate stocking density.

The welfare of meat chickens in relation to stocking density is primarily influenced by how effectively dust, noxious gases, temperature and litter quality are controlled in any given system at any given time. These factors need to be managed in such a way that chickens are not compromised through inactivity and overcrowding leading to heat stress, lameness, competition for feeders and drinkers, cardiovascular disorders, skin disorders (e.g. footpad lesions, hock burn, breast blisters) or other injuries. Rather than prescribe a limit, NAWAC considers that the onus is on growers to manage stocking density according to the welfare needs of the chickens.

Limits on stocking density for meat chickens outdoors will be more variable because of differences in the way that chickens are managed (e.g. different limits on group size and different requirements for managing access to the outside areas).

Minimum Standard No. 10 – Stocking Densities

- (a) Chickens must be managed at a stocking density that takes account of growth rate, competition for space, access to feeders and water, air temperature and quality, humidity, litter quality and activity levels, so as to maintain good health and welfare.
- (b) Notwithstanding (a), stocking density in sheds must not exceed 38kg of live weight per square metre of floor space.
- (c) Outdoor stocking density must not exceed the capacity of the outside area or cause overcrowding.

Example Indicators for Minimum Standard No. 10 – Stocking Densities.

- Chickens have access to feeders and waterers without undue competition
- Chickens have unimpeded ability to stand, turn around, and flap their wings
- Chickens outdoors are able to move and forage freely
- Information on liveweight, stocking density and planning is recorded and made available for audit. The report is maintained for a period of two years
- If chickens are inactive because of overcrowding, stocking rate is adjusted accordingly
- Where the incidence of severe footpad lesions or hock burn is higher than 2%, stocking rate is adjusted accordingly
- Where the number of culls for lameness is higher than 0.3%, or is higher than that expected for the age and strain of the chickens, stocking rate is adjusted accordingly
- Meat chickens are stocked at a maximum of 10 chickens per m² stocking density outside
- There is minimal competition at popholes

Recommended Best Practice

- a) Meat chickens should be stocked in sheds at less than 30 kg per square metre at all times.

Part 5: Providing for Behavioural Needs

Introduction

The ability of meat chickens to show normal behaviour appropriate to their age in the farm environment is an important welfare consideration. Particular behaviours will vary depending on the age of the chicken.

The minimum standards and suggested indicators outlined elsewhere in this code also contribute to addressing the behavioural needs of meat chickens.

Minimum Standard No. 11 – Providing for Behavioural Needs
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Chickens must have the opportunity to express their normal behaviours. These include, but are not limited to, feeding, drinking, sleeping, preening, walking, scratching, ground pecking, leg stretching, and vocalising.

Example Indicators for Minimum Standard No. 11 – Providing for Behavioural Needs

- Chickens are active and alert, and observed to display all the above behaviours
- Chicken activity is monitored and timely remedial action is taken as appropriate

Recommended Best Practice

- a) Chickens should be provided with environmental enrichment to maximise the expression of normal behaviours. Such practices may include:
 - i) provision of bales of hay or straw
 - ii) perches/barriers
 - iii) pecking objects
 - iv) provision of peat moss or sand to promote dustbathing and other activity
 - v) the use of a radio in sheds to accustom chickens to a range of noises and voices
 - vi) provision of trees, shrubs, or covered shelters outdoors to encourage chickens with access to the outdoors to move away from the popholes and house perimeter.
 - vii) outdoors to move away from the popholes and house perimeter.
- b) Genetic selection methods should be encouraged to promote physical traits that support the expression of normal behaviours in meat chickens.

General Information

NAWAC has concerns about the welfare implications of trends in this industry, particularly in relation to rapid growth rates. Fully-housed production systems risk producing birds that are unable to develop and display normal behaviours. The industry needs to take steps to ensure these trends do not create future welfare problems that will be ethically unacceptable to New Zealanders.

Part 6: Physical Handling

Introduction

Minimisation of undue stress and the avoidance of injury are key considerations whenever chickens are being restrained or handled.

Minimum Standard No. 12 – Physical Handling

- (a) Chickens, including chicks in hatching trays, must be moved and handled at all times in a manner that minimises the risk of falls, pain and distress and avoids injury.
- (b) Chickens, excluding day-old chicks, must not be carried by the wings or neck.
- (c) Stress of handling must be minimised by appropriate design of facilities and training of personnel.

Example Indicators for Minimum Standard No. 12 – Physical Handling

- No chickens show injuries attributable to poor handling
- All staff have received training or have suitable practical experience and demonstrate competence through the appropriate handling of chickens

6.1 Catching, Loading and Transport

Introduction

Transport and handling of animals is innately stressful. Effective management of these procedures will minimise distress, injury and discomfort. The Code of Welfare: Commercial Slaughter and the Code of Welfare: Transport also apply to meat chickens.

The main welfare issues to be considered during the catching and loading process are the risks to chickens of injury and distress. These risks can be minimised by planning and preparing adequately for the catching process, and by ensuring that all operators are suitably experienced or trained. It is important that disturbance of the chickens during the catching process is minimised and the specific processes used to catch chickens will need to take that into account. If there are going to be increased light levels during catching, then the lighting pattern may need to be changed in the days immediately prior to catching to accustom the chickens and reduce the stress of the process. To minimise the incidence of injury and distress, it is important that when crates of meat chickens are moved the chickens remain in an upright position.

Minimum Standard No. 13 – Catching, Loading and Transport

- (a) All members of the catching and transporting crews must be supervised and correctly trained in the handling of chickens.
- (b) A nominated member of the catching team must be responsible for supervising, monitoring and maintaining high welfare standards throughout the catching process and loading of chickens onto the transport vehicle.
- (c) Food must not be withheld from chickens for more than 12 hours prior to arrival at the processing plant.
- (d) Chickens must have access to water until the time of catching.
- (e) A catcher must carry no more than four chickens in each hand at any one time.
- (f) Crates and containers must be constructed and maintained to ensure there are no hazards likely to cause injury to the chickens.
- (g) Maximum densities in crates used to transport chickens must not exceed 65 kg per square metre.

- (h) Chickens must be placed into crates in such a way that they can rapidly obtain and maintain an upright position.
- (i) Crates and containers containing chickens must be placed directly, and not thrown or dropped.
- (j) Chickens that are injured during the catching and loading procedures must be humanely destroyed immediately.
- (k) Conveyances and containers must have adequate ventilation to allow the free flow of air to all chickens, even when stationary, to prevent the build-up of harmful concentrations of gases or water vapour or temperature.
- (l) Day-old chicks must be held and transported in conditions of controlled temperature and airflow.

Example Indicators for Minimum Standard No. 13 – Catching, Loading and Transport

- No chickens show injuries resulting from poor catching and loading practices
- All chickens are fit and healthy when transported
- Chicken transport crates are a minimum height of at least 22 cm and transport boxes/crates for day-old chicks are a minimum height of 10 cm.
- Any conveyor used for loading crates of live chickens is operated in such a way that there is no pile up of chickens
- The time at which feed is withdrawn from the chickens is recorded
- Crate density is recorded
- Crate size is documented
- Training records are available for inspection
- Responsibilities of the nominated person are documented

Recommended Best Practice

- a) Mechanical systems should be used for catching and loading meat chickens.
- b) Techniques for the catching, loading and transport of meat chickens should be described in each facility's quality assurance system.
- c) Feeders and drinkers should be hoisted or removed before the catching team enters the meat chicken shed.
- d) Chickens should be carried around the body and upright.
- e) Crate handling systems should be used to limit the distance chickens are carried by hand and reduce the impact of lifting and carrying of chickens during catching.

Part 7: Disease and Injury Control

7.1 Management of Health and Injury

Introduction

There is a relationship between the health and welfare of meat chickens. Disease control is essential to ensure that meat chicken welfare is maintained at optimal levels. Appropriate programmes to control disease include:

- vaccination
- preventative and therapeutic medication
- biosecurity
- hygiene; and
- pest control.

Stockmanship is important in recognition of ill health (see Part 2: Stockmanship). Signs of ill health may include a reduction in feed and water intake, reduced rate of body weight gain, changes in the colour and/or consistency of faeces, changes in litter quality, increase in odour of the ambient atmosphere, changes in appearance, activity or behaviour, or an increase in mortality. Abnormal behavioural patterns include undue competition at feeders or drinkers or both, excessive use of drinkers, abnormal noise level, unusual vocalization, aggression, irritability, panting, lethargy and feather fluffing. Healthy meat chickens are usually evenly distributed, calm and demonstrate normal behavioural patterns.

There is also a relationship between meat chicken genetics (i.e. the selection of meat chicken breeds to show particular traits, such as strong legs) and the health and welfare of meat chickens. Meat chicken breeding companies are working to improve meat chicken leg and cardiovascular health and meat chicken grower companies should do all they can to encourage this. Requirements for meat chicken breeding companies are not covered by this Code.

Minimum Standard No. 14 – Management of Health and Injury

- (a) Those responsible for the care of meat chickens must be competent at recognising the signs of good health, ill health, and injury and must consult a veterinarian as appropriate.
- (b) Meat chickens must be inspected at least once daily for evidence of ill health or injury, including any obvious gait deficit and any ill, injured or severely lame chickens must be treated or humanely destroyed immediately.
- (c) Medication must only be used in accordance with registration conditions, and the manufacturers' instructions or professional advice.
- (d) When early signs of a disease outbreak are detected, or mortality level within a shed exceeds 1% in a 24 hour period, or the number of culls for lameness is higher than expected for the age and strain of chickens, the cause must be investigated and remedial action taken promptly.

Example Indicators for Minimum Standard No. 14 – Management of Health and Injury

- Daily inspections are documented
- Dead chickens and culls are removed daily and numbers are recorded
- An appropriate response is undertaken to early signs of disease(s), lameness or mortality
- Chickens that have failed to respond to treatment are destroyed humanely and promptly
- Less than 0.3% of chickens have to be culled due to severe lameness or leg injuries at any one time
- Chickens with an obvious gait deficit (gait score 4 or 5 on a scale of 0–5) are culled

- All staff have received training or have suitable practical experience and demonstrate competence by appropriate responses to chickens and their needs.

Recommended Best Practice

- a) The production system, including the facilities and their management, whether with access outdoors or fully-housed, should be assessed regularly for the likelihood of infectious and parasitic diseases. Where there is a risk of these occurring, appropriate control systems should be implemented to prevent them.
- b) Genetic selection methods should be encouraged as a means to promote traits that minimise welfare problems in meat chickens.
- c) A veterinarian should be consulted for advice on establishing a health programme covering disease, injury and parasite control.
- d) Veterinary advice should be sought when there is:
 - i) significant injury or disease
 - ii) persistent pain or distress
 - iii) persistent ill-thrift and poor performance that does not respond to treatment
 - iv) concern about the welfare of the chicken.

General Information

NAWAC has concerns about the welfare implications of the rapidity of chicken growth that enables harvesting at about five weeks of age and risks creating chickens that may spend part of their short lives in distress from lameness. The industry needs to take steps to ensure these trends do not create future welfare problems that will not be ethically acceptable to New Zealanders.

7.2 Emergency Humane Destruction

Introduction

Humane destruction of chickens may be carried out on individuals, such as culls and runts, or on large numbers in the case of an emergency such as a disease outbreak. There are various methods of destruction and which is used will depend on the situation. Acceptable methods for killing depend on whether individual chickens are being culled or whether large numbers are being culled in the event of an emergency. Acceptable methods for killing include electrical stunning and exsanguination, stunning with an appropriate mixture of gases or neck dislocation.

Methods that are appropriate for humane destruction of day-old chicks are instantaneous fragmentation/maceration, or use of an appropriate mixture of gases.

Minimum Standard No. 15 – Emergency Humane Destruction

- (a) The method(s) used for the humane destruction of meat chickens, including unhatched eggs in the last half of incubation and day-old chicks, must ensure rapid death, which is confirmed by inspection.
- (b) People undertaking humane destruction must be appropriately trained and must ensure that chickens are handled gently and calmly at all stages of the process.
- (c) Any equipment used to undertake humane destruction must be well maintained and not overloaded, so that it operates effectively and efficiently.
- (d) Maceration equipment used for humane destruction must be designed to cause very rapid and complete fragmentation of the material into small particles.

- (e) When using gas, the procedure must ensure the collapse of every chicken within 35 seconds of exposure to the gas. Chickens 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 from the gas.

Example Indicators for Minimum Standard No. 15 – Emergency 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 carbon dioxide
 - Immediate fragmentation/maceration for unhatched eggs and day-old chicks

- Appropriate behaviour and handling of chickens, including chicks, is observed
- All chickens killed are inspected following the procedure to confirm death
- Chickens are confirmed unconscious within 35 seconds of exposure to gas
- Any other methods used for humane destruction of chickens (referred to in the OIE Terrestrial Animal Health Code, which can be viewed at: www.oie.int/standard-setting/terrestrial-code), are performed under veterinary supervision
- Persons performing humane destruction are appropriately trained and ensure that the chickens are managed gently and calmly at all stages of the process
- 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.

Recommended Best Practice

- a) Chickens should be humanely destroyed using a mixture of inert gases with a low concentration of carbon dioxide (i.e. up to 30%) to produce an atmosphere with less than 2% oxygen by volume.

Part 8: Hatchery Management

Introduction

The aim of hatchery management is to produce healthy chickens. The key processes in hatchery management which affect the health and welfare of newly hatched chicks include:

- cleaning and hygiene,
- promptness of removing chicks from hatch machines after hatching,
- grading of day-old chicks,
- destruction of cull chicks and unhatched eggs, and
- holding room conditions.

All minimum standards in this Code apply to hatcheries and chicks.

Part 9: Welfare Assurance System

Introduction

The maintenance of good records is an integral part of a welfare assurance system and of good farm management.

Recommended Best Practice

- a) To help ensure that standards of animal welfare and husbandry are maintained, each commercial meat chicken facility should implement a welfare assurance system that provides for written procedures that incorporate monitoring and reporting protocols.
- b) The elements of the welfare assurance system should provide for the minimum standards and relevant indicators, and where possible, the recommendations for best practice of this Code.
- c) The welfare assurance system should require continual review of existing systems and procedures that could enhance the welfare of meat chickens.
- d) The welfare assurance system should provide for all incidents resulting in significant sickness, injury or death of chickens to be fully investigated and documented. Where the results of an investigation may have implications for current industry management practices, a report outlining the incident and implications should, as soon as it is available, be forwarded to the appropriate industry body for consideration.

General Information

Producers and the Poultry Industry Association of New Zealand should encourage ongoing debate and assessments of management practices that may improve the welfare of meat chickens. Where improvements to current practice are identified, these should be communicated to producers via appropriate technology transfer methods such as seminars, workshops, industry newsletters and formal training (where appropriate).

Schedule I: Interpretation and Definitions

Act

The Animal Welfare Act 1999.

advisory livestock personnel

Experienced or trained personnel such as meat chicken advisors, technical advisors, and hatchery managers in commercial companies and also includes independent avian specialists, and advisory personnel from hatcheries and poultry breeding companies.

animal

As defined in the Act:

- a) Means any live member of the animal kingdom that is –
 - i) A mammal; or
 - ii) A bird; or
 - iii) A reptile; or
 - iv) An amphibian; or
 - v) A fish (bony or cartilaginous); or
 - vi) Any octopus, squid, crab, lobster, or crayfish (including freshwater crayfish); or
 - vii) Any other member of the animal kingdom which is declared from time to time by the Governor-General, by Order in Council, to be an animal for the purposes of the Act; and
- b) Includes any mammalian foetus, or any avian or reptilian pre-hatched young, that is in the last half of its period of gestation or development; and
- c) Includes any marsupial pouch young; but
- d) Does not include –
 - i) A human being; or
 - ii) Except as provided in paragraph (b) or paragraph (c), any animal in the pre-natal, prehatched, larval, or other such developmental stage.

available technology

NAWAC takes to mean technologies which are used practically to care for and manage animals, for example, existing chemicals, drugs, instruments, devices and facilities.

biosecurity

Protection from the introduction of potential disease-causing organisms.

brooder area

Area for housing chicks.

caking

Undesirable compaction of surface of litter possibly due to excess moisture.

chicks

Newly hatched meat chickens up to seven days of age.

cull

Chicken humanely killed for health or welfare reasons.

day-old chicks

Chicks up to 72 hours of age (surviving on their internal yolk sack).

friable

Easily crumbled, loose and free-flowing.

fully-housed

Enclosed housing (in sheds or barns) where the environment is controlled and the meat chickens are reliant on human management for all their daily requirements.

good practice

NAWAC takes to mean a standard of care that has a general level of acceptance among knowledgeable practitioners and experts in the field; is based on good sense and sound judgement; is practical and thorough; has robust experiential or scientific foundations; and prevents unreasonable or unnecessary harm to, or promotes the interests of, the animals to which it is applied. Good practice also takes account of the evolution of attitudes about animals and their care.

ill-treat

As defined in the Act: “in relation to an animal, means causing the animal to suffer, by any act or omission, pain or distress that in its kind or degree, or in its object, or in the circumstances in which it is inflicted, is unreasonable or unnecessary.”

instantaneous fragmentation

Mechanical method of humane destruction of eggs and day-old chicks (may also be known as maceration).

lux

An international measure of light intensity (not to be confused with watts).

meat chicken/chicken/broiler

A male or female chicken, including day-old and older chicks, kept primarily for meat production.

minimum standards

Minimum standards provide the details of specific actions people need to take in order to meet the obligations in the Act. They are identified in the text by a heading, and generally use the word “must” or similar. They are highlighted in boxes within the text.

obvious gait deficit

Severely lame chickens that only take a few steps before squatting down or are incapable of walking on their feet.

owner

As defined in the Act: “in relation to an animal, includes the parent or guardian of a person under the age of 16 years who –

- a) Owns the animal; and
- b) Is a member of the parent's or guardian's household living with and dependent on the parent or guardian."

person in charge

As defined in the Act: "in relation to an animal, includes a person who has an animal in that person's possession or custody, or under that person's care, control, or supervision."

pest

As defined in the Act: "means –

- a) Any animal in a wild state that, subject to subsection (2), the Minister of Conservation declares, by notice in the Gazette, to be a pest for the purposes of this Act:
- b) Any member of the family Mustelidae (except where held under a licence under regulations made under the Wildlife Act 1953):
- c) Any feral cat:
- d) Any feral dog:
- e) Any feral rodent:
- f) Any feral rabbit:
- g) Any feral hare:
- h) Any grass carp:
- i) Any Koi or European carp:
- j) Any silver carp:
- k) Any mosquito fish:
- l) Any animal in a wild state that is a pest or unwanted organism within the meaning of the Biosecurity Act 1993."

placement

Placing of chicks in meat chicken shed.

pophole

A small opening that provides access between indoor and outside areas.

recommended best practice

NAWAC takes to mean the best practice agreed at a particular time, following consideration of scientific information, accumulated experience and public submissions on this Code. It is usually a higher standard of practice than the minimum standard, except where the minimum standard is best practice. It is a practice that can be varied as new information comes to light. Recommendations for best practice will be particularly appropriate where it is desirable to promote or encourage better care for animals than is provided as a minimum standard. Recommended best practices are identified in the text by a heading, and generally use the word "should".

scientific knowledge

NAWAC takes to mean knowledge within animal-based scientific disciplines, especially those that deal with nutritional, environmental, health, behavioural and cognitive/neural functions, which are relevant to understanding the physical, health and behavioural needs of animals. Such knowledge is not haphazard or anecdotal; it is generated by rigorous and systematic application of the scientific method, and the results are objectively and critically reviewed before acceptance.