

THE SOUTH AFRICAN POULTRY ASSOCIATION ABRIDGED CODE OF PRACTICE: CHICK HATCHERY

The following is a summary of the minimum standards to be followed for Chick Hatcheries as set out in the Code of Practice of the South African Poultry Association. The full version is available on the SAPA website www.sapoultry.co.za

Introduction

Poultry producers involved in the production of day old chicks should have a program in place to prevent infectious and vertically transmissible diseases being transmitted via the chick.

Staff shall understand and accept responsibility to prevent unnecessary suffering of chick embryos and live chicks. Hatchery operators shall be satisfied that staff responsible for handling eggs and live chicks have the skills necessary to perform any required procedure without causing suffering.

Location of Hatcheries

The choice of a suitable isolated geographical location will facilitate hygiene and disease control and the hatchery building should therefore be preferably located as far away from other poultry and livestock.

The hatchery building should be fenced off or constructed in such a way to facilitate control of traffic and access to the facilities. Wild birds, domestic and other animals must be excluded from the hatchery area.

Building Design

The hatchery should be designed to enable suitable workflow and air circulation principles. The work flow of the incubation process should preferably be in one direction from hatching egg receiving and storage to dispatching of chicks and disposal of hatchery debris.

Flow of air through the hatchery should also preferably be in this direction. Wash water drains should also divert wash water in this direction.

The building should include physical separation of the main work areas comprising egg receiving and storage, incubation rooms, chick hatching rooms, chick handling rooms and hatchery debris disposal area. The materials used in constructing the building should be smooth and easily cleaned to facilitate hygiene control and disinfection.

Hatching Eggs

Hatching eggs should only be sourced from reputable breeder farms of which the disease status of the birds is known and documented by a knowledgeable veterinarian or accredited laboratory.

Only clean, sanitized hatching eggs received in a clean and suitable handling systems, that have been properly stored at temperatures below the embryonic threshold temperature of 24°C should be used. Dirty, broken, cracked, leaking and any other abnormal eggs should not be used for hatching purposes and it is advisable not to use floor eggs.

Hatching eggs should be handled gently and as little as possible. Personnel handling hatching eggs should wash their hands with soap and water before handling eggs or use an appropriate hand disinfectant.

Hatching eggs should be sanitized by a suitable method as prescribed by a veterinarian with poultry experience and staff should be skilled in the application of the procedures prescribed.

Hatchery Hygiene and Chick Health

Acceptable control measures must prevail to assist in the prevention of vertical (trans ovarian) transmission of the following diseases:- Mycoplasma gallisepticum, Mycoplasma synoviae, Salmonella Pullorum, S. Gallinarum, S. Enteritides and

S. Typhimurium, Avian Influenza, Leucosis, Avian encephalomyelitis, Egg Drop microbial contamination at least every 6 months.

In addition chick hatcheries shall conduct regular tests for Salmonella as per the Salmonella reduction plan. As soon as a change in the health status of the chicks has become apparent, the customer of the chicks must be notified. The hatchery should have a comprehensive cleaning, disinfection and hygiene monitoring system in place as advised by a competent veterinarian or knowledgeable person. All staff involved in the incubation processes should be aware of, and fully skilled in the application of the hygiene program as may apply to their respective areas of responsibility. Corrective action should be taken immediately should the monitoring process indicates any deviation from the standard.

Staff and Visitors

Clean overalls, hair cover nets (or other suitable headgear) and footwear should be provided for all personnel and visitors entering the hatchery.

Disinfectant foot-baths at strategic points within the hatchery, as advised by a veterinarian or knowledgeable person will assist in combating the possible transfer of bacteria from one section to another. Frequent washing of hands in a disinfectant solution or the use of alcohol gel should be encouraged.

During chick take-off, especially staff movement from the hatching section to the egg rooms and setter section should be discouraged.

Handling of Chicks

Chick Take-off

Every person working in the hatchery shall be able to understand and accept responsibility to prevent any unnecessary suffering of chicks. Hatchery operators shall be satisfied that staff responsible for handling live chicks have the skills that are necessary to perform any required procedure without causing suffering to the chicks.

During take-off, hatching trays with chicks shall be handled in the horizontal position only and chicks removed from the hatching tray as gently as possible without excessive jarring of trolleys and handling systems. Staff handling chicks should wash and disinfectant their hands before commencing work as well as frequently as is practically possible between different batches of chicks. Any cull chicks should be removed as soon as possible and humanely disposed of by neck dislocation, gassing by utilizing suitable bottled gas such as carbon dioxide or maceration. During the chick take-off process the body temperature of the chicks should not be allowed to drop unduly.

Chick sexing

In hatcheries where vent sexing is applied, this should be performed only by skilled and appropriately trained staff. Feather and colour sexing requires less skill than vent sexing but staff performing such acts should be adequately trained and competent in performing these tasks as gently as possible.

Chick Holding

Only first grade chicks with no deformities or other abnormality are to be boxed into clean containers specifically designed for the transport of chicks. Where second grade chicks are sold, they should be clearly marked as being second grade. Second grade chicks should however not be of such quality as to result in undue suffering.

Rooms in which chicks are to be held before dispatch, should be adequately ventilated and temperature controlled to ensure that chicks remain comfortable. Chicks should be dispatched as soon as possible so to ensure that they receive food and water within 48 hours of hatching.

Morphological Alteration of Chicks

Dubbing

Dubbing of male chicks should only be done when advised to be necessary by a veterinarian or the supplier of the applicable genetics. Should this practice be deemed necessary it must only be carried out by a skilled person who is competent and trained in this procedure. The procedure should be well documented and underwritten by the veterinarian.

Toe Removal

The removal of the terminal segment of each inward pointing toe of breeding male chicks may be done at the advice of a veterinarian or the supplier of the applicable genetics.

Should this practice be deemed necessary it must only be carried out by a skilled person who is competent and trained in this procedure. The procedure should be well documented and underwritten by the veterinarian.

De-Spurring

The cauterizing of the spur of breeding male chicks to avoid damage to females during mating may be performed at the advice of a veterinarian or the supplier of the applicable genetics.

Should this practice be deemed necessary it must only be carried out by a skilled person who is competent and trained in this procedure. The procedure should be well documented and underwritten by the veterinarian.

Euthanasia and Disposal of Non-Saleable Chicks

Cull and surplus hatchlings awaiting disposal must be treated as humanely as those intended for retention or sale. They must be disposed of humanely by either of the two accepted procedures below. Decapitation or cervical dislocation of individual chicks when performed by trained and competent personnel is accepted.

Carbon Dioxide

Gassing of chicks with carbon dioxide or gas mixtures with argon are accepted in the process of disposal. Chicks disposed of through this method must be placed in a container pre-filled with gas and in such a way so as to ensure good penetration of the gas and prevent suffocation.

Containers or chambers must be designed to allow continual refilling of gas to maintain the correct levels of the gas. Chicks must be exposed to the gas for a long enough period so as to cause death.

Maceration

High speed maceration of chicks using properly designed macerators is a practical and accepted method of euthanasia.

Disposal of Un-hatched Chicks and Hatch Debris

Drowning, smothering and thermal exhaustion or any other inhumane methods are not acceptable under any circumstances. High speed maceration is a practical and humane method of euthanizing large numbers of un-hatched chicks that are still within the egg at the time of removing the rest of the chicks from the chick trays.

This procedure should be carried out as soon as is practically possible after removal of the chicks from the hatcher machine so as to avoid undue suffering of the chicks that are still within the egg shell.

Rapid cooling and freezing are also accepted. All un-hatched chicks must be dead before disposal. Hatch debris should be transported in closed containers to municipal dumps or other storage facilities which would not allow for any contamination of ground water. There must be adequate fly control in the storage area where hatch debris is kept.

Transportation of Chicks

Only healthy and vigorous chicks shall be dispatched in clean containers or boxes specifically designed for handling and transport of day old chicks.

Containers must be stacked in such a manner that free airflow between stacks of containers is not hampered.

As a rule the chick box/container should allow for 20cm² per chick but environmental temperature, duration of the journey as well as design of the chick

truck shall be considered when determining the density of chick containers.

Containers with live chicks shall not be tilted more than 20 degrees from horizontal during any stage of loading or unloading. Containers should always be moved smoothly and never thrown or dropped. A tie-down device preventing containers from overturning is advisable in the chick truck.

Chick trucks should be designed in such a way that sufficient airflow is achieved to all containers within the truck and that adequate temperature control is achieved for the duration of the delivery.

Vehicles used for the transportation of live chicks over long distances must be constructed to protect the chicks against adverse weather conditions during the entire journey.

The driver of the vehicle transporting chicks shall be a responsible person with a valid and appropriate driver's license and trained in the welfare issues that could affect the chicks during transportation.

The drivers shall have telephone numbers of the owners of the chicks and emergency telephone numbers at all times during a journey.

Drivers shall at all times be able to perform their duties in an expert and responsible manner. Drivers shall not handle a vehicle in a manner that might cause the chick containers to slip or fall causing suffering. The safety and welfare of the chicks shall never be ignored or disregarded.

Chicks shall be transported in roadworthy vehicles.

Stops en-route shall only be made when absolutely necessary. When stops are made in hot weather, the vehicle must be capable of maintaining sufficient ventilation and temperature within the truck.

In the case of a truck breakdown without a standby facility causing a subsequent rise in temperature in the load space, the load shall be off-loaded if the system permits or at least spaced to accommodate the circumstances where possible.

In the event that day old chicks are transported by air, arrangements need to be made with the carrier to ensure that the chicks are not kept in draughty areas and are transported as quickly as possible.

In the event of international transport, all paperwork including import permits and health certificates need to be in order to prevent unnecessary delays.

Enough space needs to be left between pallets to ensure adequate ventilation. It is unacceptable to leave chicks on the tarmac prior to loading.

Biosecurity in Chick Hatcheries – People

Biosecurity in chick hatcheries is of the utmost importance to ensure healthy chicks.

People movement and the movement of egg trays and other equipment is one of the main means of transmitting disease between farms and hatcheries. There are different aspects of biosecurity relating to people movement in chick hatcheries including physical biosecurity and procedural biosecurity.

