

Quarantine and Isolation

Committee

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Executive Chief of the Egyptian Health Council: Prof. Mohamed Mustafa Lotief.

Head of the Committee: Prof. Ahmed M Byomi

The rapporteur of the Committee: Prof. Mohamed Mohamedy Ghanem.

Scientific Group Members: Prof. Nabil Yassien, Prof. Ashraf Aldesoky Shamaa, Prof. Amany Abbass, Prof. Dalia Mansour, Dr.Essam Sobhy Dr.Mohamed Elsharkawy, Prof. Gamal A. Sosa., Dr. Naglaa Radwan, Dr. Hend El Sheikh

Editor: Prof. Ahmed M. Byomi

Glossary

Quarantine (Qs) segregation of apparently healthy animals suspected to be exposed to infection from healthy ones who are not exposed to infection. The most likely way for disease to arrive on your farm is through the arrival of new animals, or the return of your own animals from elsewhere (markets, show.....ect).

Isolation A method for separation of sick animals from apparently healthy animals which have been exposed to infection. It allows sick animals to rest and recover and prevents disease spreading around the pen, group or wider farm. Disease may also develop within your stock at any time, so you will look to separate sick animals to protect your healthy animals.

Scope

This guideline is concerned with protection of animals already on your farm against spread of infectious and contagious diseases by separating them from the arriving animals until your assurance that they are free of disease. This is referred to as quarantine and isolation and is a key part of reducing infectious disease impact. For this manual to become an effective document, it is important that the proposed strategies are incorporated into routine protocols and staff training.

Introduction

This guideline is designed to provide some general information on animal quarantine requirements in Egypt. The term **quarantine** refers to the practice of enforced isolation of animals exposed or may be exposed to infectious agents, as well as the place in which these animals are isolated and the time period of isolation. Quarantine is routinely required when live animals or their products are imported. To avoid disease entry into a country, region, zone, compartment, or population, potentially infectious animals/material must be isolated until they have been shown to be disease free.

Enforced isolation is the first biocontainment step when potentially infected animals are brought to a production setting. Movement within or through the control area is restricted and monitored. The size/nature of the control zone depends on disease risk but usually involves a containment facility, farm, site, or complex within a particular area. The control zone may be expanded to a 2-mile radius for diseases of national/regional importance.

Establishing and maintaining a disease-free status throughout the country should be the final goal of the veterinary authorities as well as owners of animal facilities. However, given the difficulty of achieving this goal, there may be benefits to Egypt in establishing and maintaining a subpopulation with a specific health status within its territories for the purposes of international trade or disease prevention or control.

Purpose

The purpose of this guideline is to ensure that the design of your own quarantine and isolation programmes form part of your health and biosecurity plan for prevention and control of spread of infectious and contagious diseases. This is to ensure that any animal incubating a disease, and therefore not showing any signs of the disease, is examined further during the quarantine period. Some of these diseases are very devastating to the animal population.

The Target audience

The guideline is intended for all veterinarians who are responsible for animal and poultry farms as well as those responsible for veterinary clinics, zoo parks and animals owners.

Methods

Use separate housing, feeding and birthing areas.

Prevent contact with other animals.

Prevent manure movement from the isolation area to the rest of the herd.

Isolate for 21 to 30 days

Observe and examine for early disease detection.

Milk isolated cows last.

Test for diseases before adding new cattle to the main herd.

Know the source of purchases and screen for disease using laboratory testing.

Use laboratory-testing programs to maintain minimal disease herds or disease-free herd status.

You can take steps to prepare your farm so you can effectively quarantine or isolate animals.

- Purchase pregnant or unbred heifers to minimize the risk of introducing mastitis.
 - Determine the vaccination and health status of individuals and the herd of origin.
 - Purchase from herds of known health status.
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- Separate pre-weaned dairy calves from all other age groups.
 - House each dairy calf in an individual pen or hutch.
 - Place hutches away from dairy barn.
 - House 4 to 8-month-old dairy calves in small groups separate from older heifers.
 - House yearling and breeding age dairy heifers separately.
 - Separate replacement heifers from cows.
 - Separate dry dairy cows from milking cows.
 - Milk mastitic, treated, or sick cows last, and disinfect the milking claw between such animals.
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- Designate specific areas of your farm to be used for quarantine or isolation. You could require several areas at one time, for example :
 - A. A quarantine area for newly arriving/returning animals

B. An isolation area for animals in quarantine which develop disease

C. An isolation area for resident animals which become sick

•These areas should :

1. Be as far as possible from all other animals
2. Be completely separate buildings with separate airspace, and double-fenced grazings
3. Use separate equipment, if possible.
4. Have separate feed, water, drainage supplies and bedding.
5. Food should be consumed only at designated areas in the QS and left-overs should be disposed.
6. Be adequately lit to allow effective inspection of animals
7. Disinfectant footbaths placed at the isolation area entrance act as barriers to disease :
8. Keep these clean and topped up regularly with approved disinfectant at appropriate dilution

Husbandry and animal care practices:

When managing animals that are in quarantine and isolation day-to-day

1. Make all farm staff fully aware of recommended separation procedures
2. Best practice is for separate staff to take responsibility for tending animals in quarantine or isolation, using separate Personal Protective Equipment

•Where it is not possible to use separate staff :

- a. Use separate Personal Protective Equipment.
 - b. Tend to these animals last, after healthy animals.
 - c. Always disinfect or change Personal Protective Equipment after the tending routine is complete.
 - d. Inspect animals in quarantine regularly and look closely for signs of disease.
 - e. If you identify signs of disease or suspicious contact your vet immediately regarding diagnosis, treatment and future management.
 - f. Inspect animals in isolation regularly, monitor closely and report progress.
 - g. Take care when handling and disposing of contaminated bedding, waste and feed.
- Veterinary advice is required on specific aspects of quarantine and isolation

h. All animals or birds intended for slaughter must be sent direct to the designated slaughter houses after being released from the quarantine station.

i. Treat all purchased animals for external and internal parasites.

Basic building infrastructure

Animal housing

- a. Quarantine sheds- Individual pens with separate water troughs and feed mangers for each pen is ideal. If grouping done, then facilities are to be in place to rear a maximum of 5 animals per group.
- b. Sick animal shed- Away from the quarantine sheds.
- c. Isolation shed- Minimum of 100 m away from quarantine sheds
- d. The use of security measures such as physical barriers and procedural access control systems.

Vehicle regulation in quarantines

Another major source of pathogens gaining entry into the farm, other than newly introduced animals and people is through vehicles. The following precautions need to be taken for vehicle regulation:

- a. No vehicles are generally allowed entry into the quarantine.
- b. Entry may be allowed only if sanctioned by the unit head.
- c. There should be facilities for unloading feed, fodder or animals at the periphery of the quarantine without entry into it.
- d. Vehicles entering the quarantine should be clean and free of visible manure on tires and wheel wells.
- e. Vehicles should pass through tyre dips of minimum 5.5 m length, 3.5 m width and maximum depth of 6-9 inches at the centre.
- f. Cleaning & disinfection of vehicles to be done.

•The length of quarantine required

– This must cover incubation periods of most acute infectious diseases, so may be 6 weeks or longer, or the time for test results to be received.

•Import permits for imported animals – check with the veterinary authority.

•Release of animals from quarantine – formal notices may be required.

The length of isolation

This should extend till recovery or death of sick animals or birds and also for a short period after recovery.

Use vaccines

Vaccines are commonly used to protect cattle against respiratory disease and abortion. For herd additions, these vaccines may be given during the quarantine period to activate animals or birds immunity.

Management of farm traffic

Bacteria, viruses or other agents of disease are infectious when they are capable of causing infection in exposed animals. Farm visitors wearing boots or clothing freshly contaminated with infectious agents can spread diseases within a farm and among farms. Birds, rodents, pets, people, equipment and vehicles contaminated with manure (or other bodily excretions including urine, milk, saliva, uterine discharge or calving fluids) are potential disease carriers.

Control bird populations:

Plug small and large nesting holes and perches in your barn that are suitable for sparrows

Screen all openings in natural ventilation dairy barns

Seal off openings into silo roofs

Screen ledges used as nesting sites by pigeons

Control rats and mice:

Construct rodent-proof buildings

Remove food and water supplies

Destroy existing populations by baiting, fumigating or trapping.

Control people and pets

People spread contaminated material directly on footwear, hands and clothing. To decrease the spread of contaminants:

1. Inform farm workers, visitors and truckers of your farm protection methods and insist upon co-operation.
2. Discourage visitors from entering the housing and feeding areas.
3. Post "Do Not Enter" signs on livestock buildings and farm entrance gates.
4. Designate a specific visitor area to minimize contacts.
5. Insist visitors wash their boots before entering and leaving the farm.
6. Supply rubber boots or plastic disposable boots and clean coveralls for visitors.
7. Provide a footbath containing suitable disinfectant.
8. Insist workers wash their hands before milking cows and after working with sick animals.
9. Insist workers wear protective plastic or rubber gloves for calving cows.

Consolidated monthly report of quarantine station

1 GENERAL DETAILS OF THE QUARANTINE STATION DURING THE MONTH _____								
Total animals under quarantine	No. of cattle under quarantine (provide breed wise break-up)		No. of buffalo under quarantine (provide breed wise break-up)		Address from where procured	Quarantine start date	Expected date of completion of quarantine	Remarks
2 VEHICLE ENTRY DETAILS DURING THE MONTH								
No. of non-farm vehicles that entered the farm					No. of visibly soiled vehicles cleaned before entry	No. of visibly soiled vehicles cleaned & disinfected before entry	Remarks	
General	LN2	Fod der	Feed	Other (Specify)				
3 VISITOR ENTRY DETAILS DURING THE MONTH								
No. of visitors of various categories visiting the farm								
General	Skilled	Trainees	Official	Foreign	Other (Specify)	No. of visitors who had access to the animal sheds	Remarks	

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