

VETERINARY SCIENCES

PROGRAM OF BIOSAFETY IN GROWING DUCKS

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DOI: https://doi.org/10.30525/978-9934-571-89-3_87

Implementing biosecurity program in any sector is one of the main elements of its industrial activity, particularly in poultry.

In modern industrial duckling in Ukraine is an important and urgent problem of control of poultry infections. Modern industrial poultry creates prerequisites for improving performance rapid spread of infectious agents and their mutations. Of particular importance it acquires using the genetic potential of high-performance domestic and foreign poultry breeding aimed at obtaining maximum performance. This leads to a decrease adaptation abilities of birds to environmental and technological factors that have a place in modern industrial poultry. Against this background among poultry pathogens sharply pathogens most commonly circulating in various associations, dramatically reducing the resistance of poultry versus monoinfection and adversely affect the immunological reactivity [2, p. 232]. A necessary condition for growing, maintaining a healthy population of highly ducks and produce quality and safe poultry products is an effective set of veterinary and sanitary measures. To ensure stable epizootic welfare conducted constant monitoring of microbial contamination of air space and poultry systematic preventive disinfection of rooms and objects of veterinary-sanitary measures (technological equipment, inventory and packaging poultry farms are an integral part of the process of growing healthy poultry) [1, p. 1].

The complex system of biosafety and ensure its careful control, monitoring economic results of implementing biosafety regulations, that is why we can assess any risks envisaged production protocol and in time to prevent contamination of poultry pathogens [4, p. 36].

Maintenance and introduction of biosecurity measures consisting of disinfection and disinfestation. The system of control measures requires proper planning poultry, training, knowledge and monitoring their performance and understand that any process requires constant adjustment. In a production environment is important to consider the factors that cause appearance of risks in the economy [3, p. 157].

The advantage of the introduction of biosecurity on the farm is to ensure stable and efficient production cycle [5, p. 215].

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Biosecurity program when growing conditions ducks in poultry farms include: a clear division of sanitary and working areas, sanitary schedule breaks, accounting use of antibiotics, vaccinations individual programs, integrated programs and treatments disinfection of premises and equipment inventory. Conditions of effective implementation of biosafety is an individual development program in a production environment.

One of the stages of individual programs to disinfect poultry facilities include a thorough analysis of production capacity, the epizootic situation, microbiological screening of air and objects poultry houses during breaks mizhtsyklovyh breeding ducks circulating strains sensitivity to disinfectants, the application of disinfectants rotation schemes, quality control disinfection.

Develop a plan of regular disinfection in terms of economy based on science-based and targeted applications of drugs, introduction of clear processes, identifying key tasks and solving specific problems epizootic ensure the minimization of risks and the stability and efficiency of the production cycle.

The program biosafety propose to apply generally accepted principles, operating plants in the closed mode, mandatory compliance of clean and dirty areas.

Washing facilities encourage carried out in three stages: wetting, exposure and rinsing with water under high pressure. Modern technology involves the use of washing detergent foam, sometimes with disinfection effect. Aerosol disinfection allows destroy flora in remote places. Are effective surface disinfection of poultry premises directed sprays. Directed spray with a mass median particle diameter 85 ± 15 microns receiving with a special spray (productivity 900-1100 ml / min). Unsealed directed sprays disinfect the premises, platforms, extensions, some equipment, slot floors and heating batteries, heated to 40°C and above and adjacent surfaces from a distance of 1.5-2 m, providing a uniform coating of thin film disinfectant product.

Slotted floors in poultry premises disinfected recommend directed spray disinfectant (sodium hypochlorite containing active chlorine 5%, 10% solution of the drug nadotstovoyi acid). Flow rate for processing of 1 m² of total surface Slit floors (including the side and bottom surface lattice floors) should be at least 200 cm³. Slotted floors directed spray treated twice by moving the nozzle cracks across the floor at a distance of 0.5-0.7 m. The angle of the axis of the nozzle should be 60° to the horizontal floor. The disinfection of incubators and hatchery recommend the spray disinfectants, given the sensitivity of the circulating strains to disinfectants and following the instructions for their use. After disinfection of poultry houses several items washed with water.

Effective in farms biosecurity program is the use of rotation of disinfectants on the basis of periodic replacement of used disinfectants.

It is carried out to prevent the emergence of resistance to the action of disinfectants and as a result, the spread of infections. One of the main reasons for the spread of infections is gaining strains of microorganisms resistance to disinfectants, ie, the emergence of resistant strains. The reason could be the same long-term use of disinfectants. Fastest formed in microorganisms resistant to surfactants necessary by

prevent the development of resistance to disinfectants are: – not to use working solutions of disinfectants in understated (bacteriostatic) concentrations; – should properly prepare working solutions and do not use disinfectants with a passing shelf life, etc.; – Only use freshly prepared working solutions of disinfectants; – does not maintain long-term working solutions of disinfectants; – monitor the stability of microorganisms to disinfectants; – promptly and properly conduct rotation of disinfectants.

For rational use of disinfectants recommended: use active ingredients from different chemical classes, different mechanisms of action on microbial cells; change the group disinfectants during work intervals of 3-6 months; Current treatment and conduct general cleaning with disinfectant active ingredients of different chemical groups; do not underestimate the concentration of working solutions; optimize the choice of disinfectants on disinfection. In the case of disinfectant in terms of poultry farms should pay attention to the active ingredients to predict drug efficacy bactericidal effect on microorganisms, and with it the full biodegradable disinfectants to non-toxic components. Thus, in terms of management, Biosafety – an effective and most economical way to protect poultry farms from infectious agents. This system measures to prevent contact with ducks pathogenic factor which is complemented by regular monitoring of diseases and vaccination programs.

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