ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ



# UDK: 636:614. 45 VETERINARY BIOSECURITY IN LIVESTOCK FARMS

# Assistant: **Klichov Odil Ilkhomovich** <u>E-mail: odilklichov94@gmail.com</u> Samarkand State University of Veterinary Medicine, Livestock and Biotechnologies

**Abstract.** In this article, the rules of biosecurity in livestock farms, sanitary control of animals in farms, control of water and air pollution, ensuring the quality and safety of food raw materials and food production equipment, as a result of the activities of animal product processing enterprises information about the generated biological waste is given.

**Key words:** Biosecurity, biological diversity, Cartagena Protocol, international convention, biological waste, pathogenic microorganisms, isolation, quarantine, production zone.

**Enter.** President of the Republic of Uzbekistan Shavkat Mirziyoyev on October 9, 2019 adopted by the Legislative Chamber, approved by the Senate on October 11 "On the accession of the Republic of Uzbekistan to the Cartagena Protocol on Biosafety of the Convention on Biological Diversity signed the Law". This Protocol was adopted on January 29, 2000 in Montreal, and until now 171 countries and the European Union (EU) as an international organization have joined the Protocol. The President also signed the law "On Ratification of the International Convention on the Protection and Promotion of Various Forms of Cultural Expressions". This convention was adopted by the Legislative Chamber on September 30, 2019, and approved by the Senate on October 11. The main purpose of this Convention is to protect and encourage various forms of cultural self-expression, to create conditions for free cooperation of different cultures based on strengthening international cooperation and consensus in this field.

**Relevance of the topic.** Biological safety in animal husbandry is a system of protection of animals and products from contamination, and this system implements preventive measures against factors that have a negative impact on the production of animal products. Veterinary-sanitary measures must be carried out in livestock farms in compliance with biosecurity rules.

## Rules of biosecurity in livestock farms:

1.Preventing the entry of pathogenic microorganisms into warehouses, feed stores and other production buildings of the farm.

2.Ensuring the safe release or limiting the spread of pathogenic microorganisms when they enter the farm.

Выпуск журнала №-34 Часть-7\_Декабрь -2023





3.Reducing the concentration of pathogenic microorganisms on the farm.

4.Control of sick animals.

5.Reducing the risk of contamination or damage to livestock products.

The purpose and objectives of the research. Design of livestock farms, construction of buildings at a long distance from sources of pollution and damage in the prescribed manner. Slaughterhouses or poultry houses, meat and milk processing plants, manure pits and should be located far from highways and railways. Sanitary control of animals, disease control, treatment and correct use of sanitary protection means. Planned prophylactic examinations should be carried out to detect tuberculosis, brucellosis, leukemia, paratuberculosis and other infectious diseases that can spread among most farm animals and can be transmitted to humans. Separation of new animals brought to the farm from permanent livestock of the farm. It is necessary to keep imported animals in a separate block, to prevent stray and wild animals from coming into contact with farm livestock. For this, it is necessary to surround the farm with fences.

All new animals entering the farm must be examined by a veterinarian and undergo a 30-day preventive quarantine. Outside the fenced area, there should be a specially equipped place for temporary storage of dead animals. Sanitary control of animals, disease control, treatment and correct use of sanitary protection means. Planned prophylactic examinations should be carried out to detect tuberculosis, brucellosis, leukemia, paratuberculosis and other infectious diseases that can spread among most farm animals and can be transmitted to humans.

**Control of water and air pollution.** Water is a very important substance for animals. Dairy cows can drink 80-90 liters of water per day, up to 100 liters on hot days. Dairy cows have a very high demand for water. Therefore, the water they drink must be clean.

**Correct use of medicines.** Administration of medicines based on the necessary rules and guidelines serves to keep animals healthy and increase their productivity. When using medicines, they accumulate in the body for a certain period of time, even in livestock products. Limiting the entry of strangers to the farm, cleaning the farm area, controlling disinfection and disinsection activities. These measures help prevent the introduction and spread of infection. At the entrances to the economic territory, it is necessary to ensure the passage of all vehicles through the barrier, as well as the passage of people entering the economic territory. A biosecurity system should be in place to control insects and rodents that can spread dangerous diseases.

**Results and their analysis.** In our country, the quality and ecological safety of food raw materials and food products is ensured by:

Ensuring the state regulation and taking necessary measures to ensure the quality and safety of food raw materials and food products, production equipment, including:





food raw materials and food products, production equipment and products technical regulation and standardization of quality and safety, hygienic regulation and registration by the state, licensing of certain types of these activities, certification of quality systems of production products, and the quality of food raw materials and food products and application of other measures aimed at ensuring safety. Animals, raw materials of various purposes, genetic material, biological products for veterinary purposes, under certain conditions can pose a potential risk to the life and health of animals and people, as well as to the environment, and therefore "Veterinary is considered an object of control according to the law.

Veterinary-sanitary requirements for the place of slaughter of animals (meat processing plants, slaughterhouses and poultry houses).

Slaughterhouses are divided into three main zones: pre-slaughter, main production and auxiliary buildings. Livestock area is intended for reception of animals before slaughter, veterinary inspection. It will have a preventive department (quarantine and isolation department) with vets for healthy livestock, a platform for unloading animals and scales;

The main production zone is where animals are slaughtered, carcasses are separated, internal fat, guts and fur are processed, meat is cooled, frozen and salted, and sausages and fodder products are produced. This zone includes a slaughterhouse, a refrigerator, a sausage shop and a salting department;

The territory of auxiliary facilities includes administrative buildings, additional buildings, a feed store, a management building, etc.

Manure (semi-liquid, liquid and manure flow), depending on the moisture content, can be used as an organic fertilizer and energy source, which creates prospects for use as a fertilizer for agricultural land and pastures.

Compared to other solid types of organic fertilizers, liquid manure and manure waste is a fast-absorbing fertilizer with a high ratio of carbon and nitrogen and contains all the nutrients needed by plants. At the same time, liquid manure is classified as an organic environmental pollutant, 1 ml of which contains up to 170 million microbial cells. Animal manure has always been used as a local fertilizer in the national economy. Nitrogen compounds necessary for plants in the composition of manure reach 42-43%. But the manure contains a lot of weed seeds, pathogens of infectious diseases, fungi, and eggs of insects. Therefore, if the manure left by animals is properly stored and disinfected, it will not become a spreader of diseases, that is, it will remain the main source of diseases. Therefore, hot sterilization of manure in manure farms is of great importance from a veterinary point of view.

94

Выпуск журнала №-34 Часть-7\_ Декабрь -2023



http://www.newjournal.org/



Выпуск журнала №-34 Часть-7\_ Декабрь -2023



### Conclusions

1. Collection, disposal and disposal of biological waste is mandatory for all proprietary enterprises, animal products processing.

2. The disposal and destruction of biological waste is an important factor in fully ensuring the prevention of the occurrence and spread of animal diseases and in reducing their harmful effects on the environment.

3. Biological waste, as well as natural and man-made disasters, generated as a result of the activity of animal products processing enterprises should be collected, disposed of and destroyed.

4. There should be a sewage system for draining atmospheric water and waste water from the places intended for animals before slaughter in the poultry house.

### List of used literature.

1.Klichov Odil Ilxomovich. Chorvachilik xoʻjaliklari va chorvachilik mahsulotlarini qayta ishlash korxonalarida veterinariya bioxavfsizligi. Veterinariya meditsinasi jurnali maxsus son № 3 2023 yil, 6-oktabr ISSN 2991-554-3 63-64 betlar.

.Новоселова Т. "Учебное пособие по биологической безопасности",Научноисследовательский центр по разоружению, Университет Брэдфорда, Англия,

3.Никитина Е.В., Решетник О.А. «Биобезопасность пищевых продуктов», учебное пособие, Казанский государственный технологический университет, К

4.<u>Азаев М.Ш.</u>, <u>Агафонов А.П.</u>, <u>Дадаева А.А.</u> «Основы биологической б

**5**. Ibragimov F. B., Ilyasov Z. I., Ibragimov F. M. VETERINARY SANITATION OF FISH MEAT QUALITY ASSESSMENT OF ASPECTS. – 2023.

6. Ермишин А.П., Подлисских В.Е., Воронкова Е.В., Аношенко Б.Ю., Зарьков В.М. «Биотехнология, биобезопасность, биоэтика» Минск «Тэхналогия», Рл неекки стророков кистороков костороков кистороков кистороков костороков кистороков костороков костороков костороков костороков костороков костороков костороков косторок кистороков костороков косто

**96** 

http://www.newjournal.org/

W B Выпуск журнала №-34 Часть-7\_ Декабрь -2023