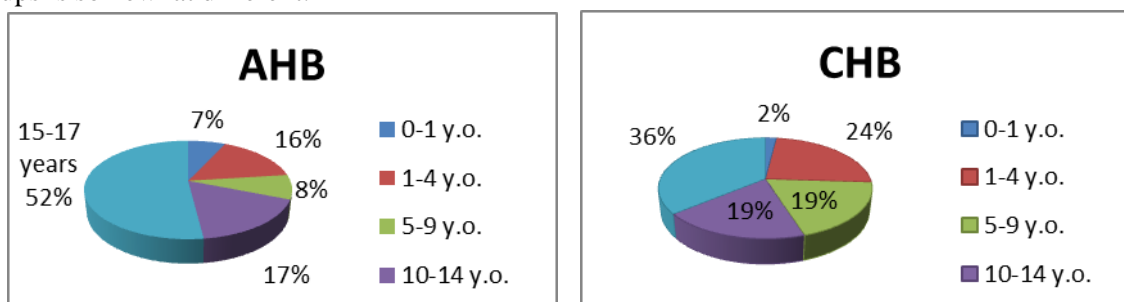


The incidence rate of GHB of the total population in the intensive index ranged from a minimum of 3.08 per 100 thousand population in 2014 to a maximum of 3.98 per 100 thousand population in 2013. The indicators of the morbidity of the total population for chronic forms of HB were highest in 2015 – 4.09 per 100 thousand population, the lowest in the analyzed period – in 2017 – 3.54 per 100 thousand population. The average multi-year indicator of the incidence of AHB in Ukraine was 3.39 per 100 thousand population, and the chronic – 3.75 per 100 thousand population. One can state the stable tendency to reduce the incidence of acute and chronic infections in the 5-year-old dynamics. Similar trends have been identified in a lot of regions in Ukraine, despite significant territorial heterogeneity in recorded incidence rates. The incidence rate of AHB in Ukraine exceeds the EU / EEA analogues in 2013 – 2017 (0.6 per 100,000 population) on average in 5.75 times, while the incidence rates for CHB are lower than indexes in EU / EEA countries in 2013-2017 (9.9 per 100 thousand population) in 2.64 times.

Adults more often suffered from HB than children under the age of 18. On average, the adult population accounted for (95.81 ± 8.96)% of all cases of HBV-infection. For 1 case of AHB in children in different years there were 14.3 to 22.7 cases of disease among adults (on average – 17.4); for 1 case of CHB – from 25.1 to 45.5 cases respectively (on average – 31.8).

Among children, the largest number of cases of GV in total for 2013-2017 belonged to the age group of 15-17 years – 302, then 1-4 years – 128 cases, 10-14 years – 117 cases, 5-9 years – 81 cases, children up to 1 year – 34 cases. The proportion of morbidity in GHB and HGV in children of different age groups is somewhat different.



Conclusions.

– During the analyzed period, no significant changes were observed in the manifestations of the epidemic process of HB in Ukraine in terms of incidence: the epidemic tendency of the incidence for the period from 2013 to 2017 was characterized by a moderate decline in the intensity indicators for both AHB and CHB.

– The decrease in the number of patients with CHB in Ukraine than in the EU / EEA countries by 2.64 times, as well as the increase in the incidence of AHB in 5.75 times doubts the accuracy of the incidence of AHB and CHB and indicates the inadequacy of data and can not accurately describe the situation morbidity.

– AHB and CHB in absolute numbers were recorded predominantly among the adult population (not less than 95%), but a high incidence of HB in children 1-4 and 5-9 was shown, which is related to the reduction of vaccination coverage against HB.

BACTERIOLOGICAL EVALUATION OF SOME COMMERCIAL FELINE RAW DIETS

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Introduction. An important component of the health of Pets – quality food. Today, every responsible owner has a huge choice than to feed your pet: ready-made dry and wet food or natural food. Components used for the production of super Premium feed, the highest quality. Preparation of feed of this class is carried out with the use of special technologies. Due to this, the nutrients of feed are most

close to natural and are well absorbed by animals. Also an integral part of their quality is compliance with microbiological purity.

Aim. To determine microbiological parameters in dry complete feed for cats of Super Premium class. Determine their biosafety.

Materials and methods. Materials – three kinds of complete dry food for cats Super Premium in a package weighing more than 4 kg. Sampling was performed by opening the package and at the end of its use. Meat-peptone agar (MPA), Endo agar, selective salt agar (ESA), Saburo agar, Wilson-Blair medium were used for research. The studies were conducted using laboratory (microbiological) methods of research, in accordance with the Order of the Ministry of Agrarian Policy and Food of Ukraine dated 19.03.2012 № 131 «On approval of the List of maximum permissible levels of undesirable substances in feed and feed raw materials for animals» on the basis of research Laboratory of microbiological and immunological research at the Department of Microbiology, Virology and Immunology National University of pharmacy.

Results and discussion. On MPA we determined the total microbial contamination, on endo agar-the presence of enterobacteria, ESA-the presence of Staphylococcus on Wilson-Blair medium – the presence of toxin-forming anaerobes, on Saburo agar-the total number of fungi.

In the study of sample number 1 (when opening the package), it was found that the total microbial contamination in 1 g of feed was $2,4 \cdot 10^1$ colony – forming units (CFU), enterobacteria, toxin-forming anaerobes, coagulase-positive staphylococci and fungi-were not isolated. At the end of its use (after 1 month), the indicator of total microbial contamination increased to $8,1 \cdot 10^2$ CFU in 1 g, also isolated coagulase-negative *Staphylococcus saprophyticus*. Other indicators of food remained unchanged.

In the study of sample number 2 (when opening the package), the total microbial contamination in 1 g of feed was $2,8 \cdot 10^1$ CFU, enterobacteria, toxin-forming anaerobes, coagulase-positive staphylococci and fungi-were not found. At the end of its use (after 1 month), the indicator of total microbial contamination increased to $8,3 \cdot 10^2$ CFU in 1 g, enterobacteria, toxin-forming anaerobes, coagulase-positive staphylococci and fungi were also not isolated.

In the study of sample number 3 (when opening the package), it was found that the total microbial contamination in 1 g of feed was $2,7 \cdot 10^1$ CFU, enterobacteria, toxin – forming anaerobes, coagulase-positive staphylococci and fungi-were not isolated. At the end of its use (after 4 months), the indicator of total microbial contamination increased to $8,7 \cdot 10^2$ CFU in 1 g, also isolated coagulase-positive *Staphylococcus aureus*, which does not meet existing standards. Other indicators of food remained unchanged.

Conclusions. So, after carrying out bacteriological researches it is possible to claim that in the Ukrainian market dry forages for cats of a Super Premium class meet the standards and are safe for feeding. But the owners should be vigilant and monitor the shelf life of feed. After the feed package is opened, they are allowed to feed the animals for 1 month. Packaging of feed that has been opened for more than 1 month is not recommended for animal feeding.

ANTIBIOTIC RESISTANCE IN BACTERIA: LOOK AT THE PROBLEM AND PROSPECTS OF ITS DECISIONS

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Introduction. Antibiotics have become the most important achievement of humankind in the XX century. But to date, many cases of bacterial resistance to antibiotics have been recorded. In 2011, the World Health Organization announced a global problem of antibiotic resistance, which has already engulfed the whole world.

Aim. To analyze the literature on the resistance of bacteria to antibiotics.