

measles mortality by 95 % (20 times) compared with 2000, and by 2020, completely eliminate measles (as well as rubella) in at least five WHO regions. WHO experts note that the current situation was caused by a sharp decline in measles vaccination levels, especially in marginalized groups in several European countries.

Conclusions. Only since the beginning of 2018 in Ukraine, 15 people died of complications from measles, among them four adults and 11 children. The risk of getting sick also increases due to the joint presence of children in schools and kindergartens. Therefore, it is very important that children are vaccinated in time according to the preventive vaccination calendar. The Ministry of Health added, according to the operational data of the Center for Public Health of the Ministry of Health of Ukraine, during the 9th week of 2019, 2.524 people fell ill with measles – 1.230 adults and 1.312 children. Since the beginning of this year, ten people have already died in Ukraine, including three children.

THE DISINFECTANTS' ANTIBACTERIAL ACTIVITY DETERMINATION

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Introduction. In the socio-medical context, disinfection can be defined as a set of measures taken to reduce to a «safe» level of pathogenic microorganisms (viruses, bacteria, fungi, spores, protozoa) present on the surface or in the environment, by neutralization or removal. Although modern preparations are highly effective, safe, compatible and harmless for materials of treated surfaces and products, have specialized cleansing action for organic and inorganic types of pollution, are stable in use, the problem of the microorganisms' resistance to disinfectants formation remains relevant. The observed resistant microorganisms number increase in poses the task of new disinfectants developing and the modes of their use that meet the needs of medical institutions.

Aim. To study modern methods for determining the activity of disinfectants? To determine the effective disinfecting parameters of the complex preparation based on the oxidizing agent with respect to test strains of bacteria of the genera *Escherichia*, *Staphylococcus*, *Bacillus*.

Materials and methods. Selection of concentrations, modes of use and methods of the disinfectant based on peracetic acid activity testing was carried out at the base of the departments of microbiology, virology and immunology and analytical chemistry, NUPh. Museum strains *E. coli* ATCC 25922, *S. aureus* ATCC 25923, *B. subtilis* ATCC 6633 were used. The unified method was used to determine the bacteria sensitivity to disinfectants in solution.

Results and discussion. The purpose of disinfection is to reduce or eliminate the microbial load present in the environment or at the facilities to be used. The main methods of disinfection are mechanical, chemical, physical, biological and combined. There are local (current and final) and prophylactic (planned and as needed) types of disinfection. According to the main active substances, modern disinfectants are divided into haloid-, aldehyde-, alcohol-containing preparations; oxidizing agents; surfactants; guanidine derivatives; phenols; acids, alkali. Resistance to disinfectants is formed more slowly than to antibiotics. The mechanisms of this process have not been studied enough, its cause may be the long-term use of the same disinfectants. Microbial resistance to surfactants and chlorine-containing substances develops faster.

Conclusions. In the past decade, the main trend in the development of chemical disinfectants is not to create new ones, but to find ways to activate the disinfectants used. It is aimed at developing of modes in which a high bactericidal effect is maintained at a minimum concentration of active ingredients, and corrosive or destructive activity in relation to the materials of the product, as well as toxic effects on humans, becomes minimal.