Scientists of the Federal Center for toxicological Security, together with colleagues from the Kazan Academy of Veterinary Medicine, have created a new test for the diagnosis of botulism of type B in agricultural animals. Development allows you to detect the disease even with the minimum content of the pathogen and is highly accurate, which accelerates the diagnosis and the onset of treatment.

The test is based on the method using erythrocytes of sheep treated with formalin and tannin. Inactivated bacteria are applied to their surface. In contact with a blood sample containing antibodies to type B botulism, an agglutination reaction occurs – gluing red blood cells.

Tests showed high efficiency of the dough. It accurately reveals the target type of pathogen even with strong dilution of the sample, while almost no responding to other types of botulism. There are no false positive results.

Botulism is a dangerous disease that affects the nervous system of animals. It is caused by bacteria toxin, which leads to paralysis and impaired motor functions. The main source of infection is poor -quality food. Among several types of botulism, type B is one of the most common.