

# **EVOLUTION OF EPIZOOTIC PROCESS OF AFRICAN SWINE FEVER IN UKRAINE**

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In the article to conducted analysis of epizootic process of African swine fever (ASF) during 2012-2016 years. We studied the emergence of ASF and the evolution of epizootic process in Ukraine considering they are a continuation of the epizootic of ASF in the Russian Federation.

During the study period on the territory of Ukraine was enough of susceptible domestic and wild pigs. Conducive factors for the occurrence of infections were insufficient protection of the pig farms against the introduction the ASFV.

It was revealed that new foci not was arise within 17 months after initial skidding of the virus in 2012 on the territory of Ukraine (Zaporozhe region) and the elimination of the outbreak.

A new stage of the evolution of epizootic process of ASF started in 2014, when infected wild boars massively migrated from existing endemic territories of the Russian Federation on the territory of Ukraine.

It is shown discreteness currents of epizootic with the distribution at few temporary cycles. These cycles are interrupted at intervals, during which the disease did not register. In its turn, cycles structurally composed of separate outbreaks of different amounts.

Delineated period the initial stage of epizootic process is when there is a considerable interval between cycles epizootic. The disease spread to domestic pigs. New paths and factors of transmission of the pathogen to attach the transmission of the virus (transport connections, the sale of infected pigs and their products production, and food scraps that were not inactivated, etc.).

With such a combination of transmission sensitive animals the intervals between the cycles of disease and individual outbreaks diminished. And there was a tendency to an increase in the cycle, in line with the stage of evolution of the epizootic. Observation for evolution of epizootic process of ASF in the wild and domestic pigs allowed distributing the foci of infection in the stationary and mobile. It makes use of

different approaches to the planning and implementation of veterinary and sanitary and preventive measures.

Stationary foci of infection occur when the pigs get sick in the household with restricted area, when pigs have direct contact and constantly are at the same place (the piggery, the courtyard, the fold, etc.).

The virus, which released from sick pigs, contaminates a small area with a high density of susceptible animals. Such conditions contributing to rise of concentration of virus, transmission of virus to susceptible animals and the rapid spread of the infection in the swine herd.

In stationary foci, possibly, to stop the disease by effectively conduct veterinary-sanitary measures (liquidation of sick and suspected in disease of pigs, disinfection).

Moving foci of infection occur when the infected pigs constantly (or once) moved over long distances, contaminating a large area the ASFV. These properties are especially characteristic of the families the infected wild boar. The territory, which infected moving foci of disease difficult to neutralize from pathogen through the means that exist.

Using the results obtained, the authors have proposed measures for the control of ASF, which are based on a break of element of epizootic chain, leading to domestic pigs.

**Keywords:** AFRICAN SWINE FEVER, DOMESTIC PIGS, EPIZOOTIC PROCESS, FOCUS OF ENDEMIC DISEASE, WILD BOARS.