Risks of African Swine Fever Spread Assessed

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GLOBAL - In the latest issue of Empres Watch, FAO has published a report entitled 'African swine fever in the Russian Federation: risk factors for Europe and beyond'.

Since 2008, African Swine Fever (ASF) persists endemically and continues to spread into new areas of the Russian Federation, concluded the FAO report. Half of the 30 affected administrative units are either endemic or on the way to becoming endemic, including Tverskaya Oblast, where some of the highest wild boar densities are found. The analysis of outbreak data from the Russian Federation in this study, provides valuable lessons for at-risk countries in the region and beyond. In the Russian Federation, the high-risk periods for disease introduction and spread are summer and fall for domestic pigs, and the end of spring and winter for wild boar.

"Countries bordering the Russian Federation with large low-biosecurity pig populations, particularly Ukraine, Republic of Moldova, Kazakhstan and Latvia are most vulnerable to ASF introduction and endemic establishment."

The low-biosecurity sector remains the main risk factor for disease introduction and endemicity, almost exclusively through swill-feeding of infected pork. The long resistance of African Swine Fever virus (ASFV) in pork and other pig products represent the main reservoir of the disease. In the absence of adequate control measures, low-biosecurity production systems can sustain ASF transmission indefinitely, seasonally leaking to higher biosecurity sectors, i.e. semi-commercial and even industrial pig farms.

Timely detection of ASF can be complicated and often delayed, thus allowing further spread through the movement of pig products within, and often outside, the affected region. ASF also spills easily from low-biosecurity systems to wild boar, usually through the illegal disposal of contaminated carcasses into the environment. So far, circulation of ASF observed in wild boar populations has been limited in space and time. However, the role of wild boar could change into a year-round transmission cycle, should denser populations be affected. In addition, the role of wild boar in transboundary spread cannot be neglected. The worsening of the epidemic in the Russian Federation, with an increased ASFV load and circulation and the establishment of the disease in central European Russia, imply an exponential increase in the risk of ASF to further expand westwards through the increasingly dense populations of low-biosecurity pig and wild boar populations, particularly Ukraine, Republic of Moldova, Kazakhstan and Latvia are most vulnerable to ASF introduction and endemic establishment.

At-risk countries should be on high alert and should learn from the Russian experience, investing in ASF preparedness and improving their early detection and response capacity.

Sporadic introductions are bound to occur, so a swift response to outbreaks to prevent further spread is critical.

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