Reemergence of Classical Swine Fever, Japan, 2018

Alexander Postel, Tatsuya Nishi, Ken-ichiro Kameyama, Denise Meyer, Oliver Suckstorf, Katsuhiko Fukai, Paul Becher

Author affiliations: University of Veterinary Medicine, Hannover, Germany (A. Postel, D. Meyer, O. Suckstorf, P. Becher); National Agriculture and Food Research Organization, Tokyo, Japan (T. Nishi, K. Kameyama, K. Fukai)

DOI: https://doi.org/10.3201/eid2506.181578

In September 2018, classical swine fever reemerged in Japan after 26 years, affecting domestic pigs and wild boars. The causative virus belongs to the 2.1 subgenotype, which caused repeated outbreaks in eastern and Southeast Asia. Intensive surveillance of swine and vaccination of wild boars will help control and eradicate this disease in Japan.

Classical swine fever (CSF) is one of the economically most devastating diseases worldwide and is notifiable to the World Organisation for Animal Health (OIE). The presence of CSF in a pig population results in severe restrictions on international trade of pigs and pork products. Many countries have implemented compulsory eradication programs and perform intensive surveillance. Most countries with industrialized pig production and high biosecurity standards have achieved the OIE status of being CSF free, including Japan in 2015 (1). Nevertheless, CSF is endemic to many countries that have a high number of backyard pigs. Because wild boars are as susceptible to CSF virus (CSFV) as domestic pigs, eradication of CSF in wild boars is of epidemiologic value (2).

CSFV, a positive-sense RNA virus (family Flaviviridae, genus Pestivirus) is divided into 3 major genotypes (1–3) and several subgenotypes (3,4). In Europe, the more recent outbreaks were caused by genotype 2.1 (Lithuania, 2009 and 2011) and genotype 2.3 (Latvia, 2013–2015) (5). In Asia, recent outbreaks were caused mainly by CSFV genotypes 1.1, 2.1, 2.2, and 2.3.

The spread of African swine fever (ASF) across China in 2018 has increased awareness of ASF and CSF in Southeast Asia. During August 16–September 3, 2018, at a pig farm in Gifu city, Gifu Prefecture, Japan, ≈20 fattening pigs died. A veterinarian recognized that the pigs were weakened and inappetent; no clinical signs were detected before...