

2-6 Classical swine fever

What is Classical swine fever?

Classical swine fever (CSF) is a contagious viral disease of pigs and wild boars caused by the classical swine fever virus. The disease is highly contagious and has no treatment and thus, it is designated as a Domestic animal infectious disease. The disease is transmitted through direct or indirect contact with infected animals, including nasal secretion and feces of infected animals. Infected animals develop a variety of clinical signs ranging from acute cases with fever, leukopenia, anorexia, cyanosis of the auricle, and death in a short period to those with a long-term course. The strain currently prevalent in Japan is considered to be moderately virulent and less likely to show severe symptoms.

In Japan, an outbreak was confirmed in September 2018 for the first time in 26 years at a domestic pig farm, and later, infection in wild boars was also confirmed (Chart 2-6-1). Currently, reflecting the spread of disease in wild boars, vaccination of domestic pigs in the designated area, and distribution of oral vaccine to wild boars are being conducted (Chart 2-6-3).

Objectives and methods of surveillance

Surveillance on domestic pigs and wild boars is conducted for early detection of CSF.

<Domestic pigs>

(1) Surveillance methods

In addition to the inspections conducted in response to notifications for suspicion of CSF, antibody tests are conducted on non-vaccinated farms, and antigen tests are conducted using swine samples submitted for pathological appraisal.

①Periodic on-site inspections of farms

In principle, each prefecture's livestock hygiene service center (LHSC) conducts on-site inspections at the pig farm once a year to check the clinical condition. CSF testing is conducted if abnormalities such as cyanosis or fever are observed.

②Antibody test

Antibody tests targeting pigs in non-vaccinated

farms are conducted to detect infection.

③Testing of samples submitted for pathological appraisal

When pathological appraisal was conducted by LHSC upon producer's request, samples are also tested for CSF.

(2) Surveillance results

①Periodic on-site inspections of farms

In FY2023, on-site inspections were conducted on 2,816 farms (preliminary figures), and no abnormalities were found.

②Antibody test

In FY2023, 4,135 swine from 180 non-vaccinated farms were tested, and all results were negative for CSF (Chart 2-6-2).

③Testing of samples submitted for pathological appraisal

In FY2023, tests were conducted on samples collected from 617 pigs in 205 farms (preliminary results), with results negative for CSF.

<Wild boars>

(1) Surveillance methods

Wild boars that were dead and those captured are tested for CSF.

(2) Surveillance results

The number of wild boars tested for CSF has been increasing, reflecting the expansion of CSF-infected areas; in FY2023, 621 dead boars and 30,477 captured boars were tested, with 221 (35.6%) and 1,079 (3.5%) being PCR positive, respectively (Chart 2-6-4, Chart 2-6-5). Infected wild boars were detected in 34 prefectures until FY2022, and in FY2023, infected boars were newly confirmed in Okayama prefecture, bringing the total to 35 prefectures. A map showing the latest status of CSF in wild boar and a detailed survey analysis is available on the MAFF website.

<https://www.maff.go.jp/j/syuan/douei/csf/>



Chart 2-6-1 Number of CSF outbreaks

	2018	2019	2020	2021	2022	2023
# of cases	6	45	10	15	9	4

Chart 2-6-2 Surveillance(antibody test) in domestic pigs in FY2023

# of farms	# of animals tested			# of positive by antibody test	# of confirmed
	sows	feeders	others		
180	1,764	2,340	31	0	0

Chart 2-6-3 Prefectures with CSF outbreaks in domestic pigs, prefectures with CSF-positive cases in wild boar, and prefectures recommended to vaccinate domestic pigs as of the end of FY2023.

Prefectures with CSF outbreaks in domestic pigs: Red (no outbreak in Red-shaded since FY2023.)
[20 prefectures] (2,721,030 pigs (30.4% of the national total) *)
Prefectures with CSF-positive cases in wild boar: Red (except Okinawa), Orange
[35 prefectures] (4,040,090 pigs (45.1% of the national total) *)
Prefectures recommended to vaccinate domestic pigs: Red, Orange and Yellow
[46 prefectures] (8,196,400 pigs (91.5% of the national total) *)
*Data are based on the Statistical Survey on Livestock in 2023

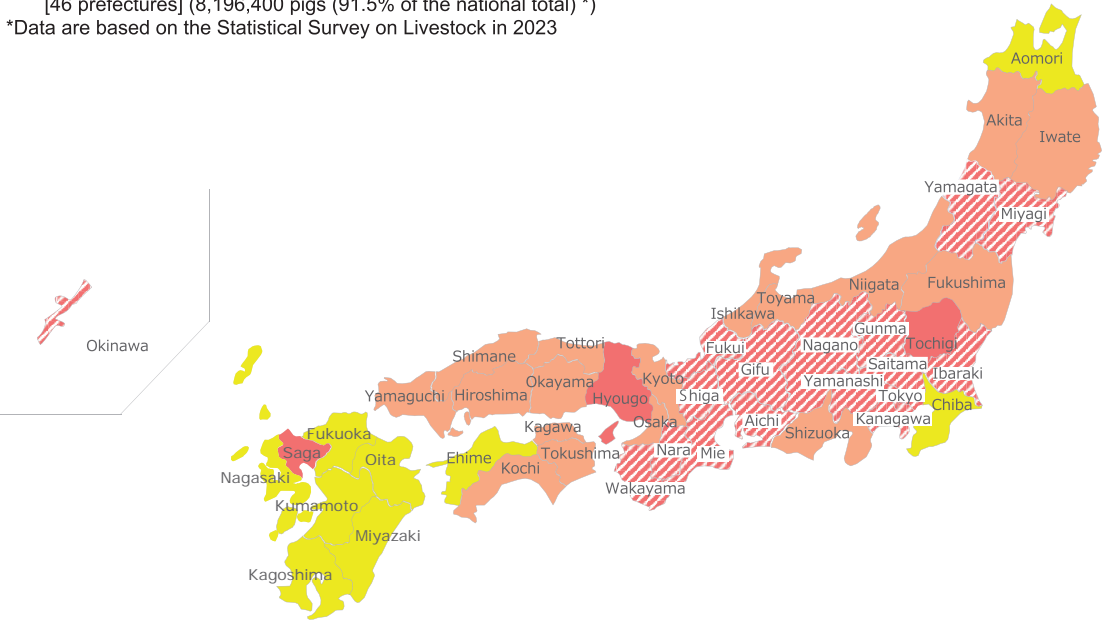


Chart 2-6-4 Surveillance on wild boars (PCR) in FY2023

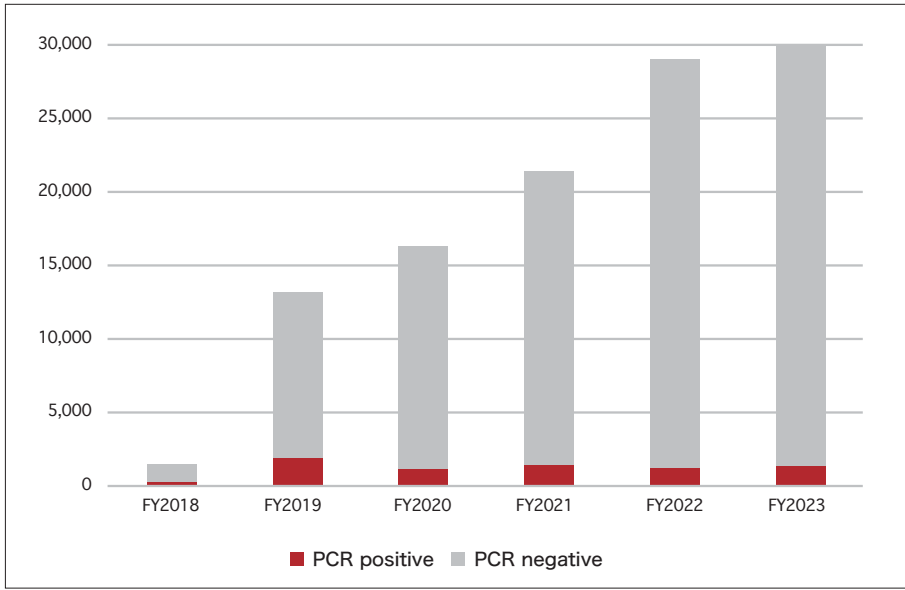
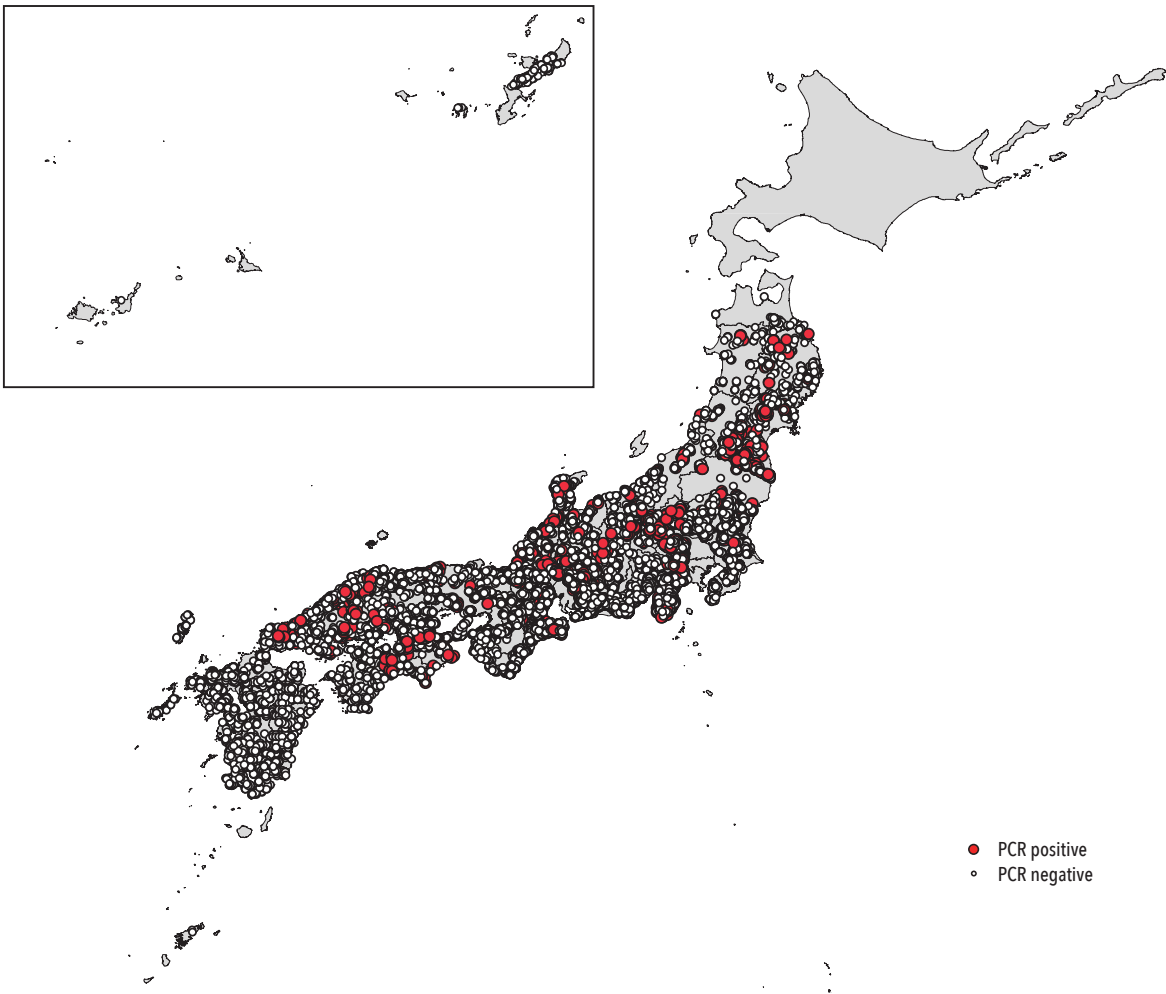


Chart 2-6-5 Distribution of wild boars tested for CSF in FY2023



2-7 African swine fever

What is African swine fever?

African swine fever (ASF) is a contagious disease of pigs and wild boars characterized by fever and systemic hemorrhagic lesions caused by African swine fever virus infection. Due to its high mortality without any treatment or available vaccine, the anticipated impact on the livestock industry is enormous once it occurs. ASF is designated as a Domestic animal infectious disease in Japan.

ASF used to be enzootic in the African region. However, the infected area expanded after the infection spread to Europe in 2007. Concerning the Asian region, the first outbreak was reported in China in August 2018, then, the infection has been spreading in the region. To date, there have been no outbreaks in Japan, and Japan is increasing vigilance against the introduction of the disease from overseas.

Surveillance methods and results

Surveillance of domestic pigs and wild boars is conducted to monitor the invasion and occurrence of ASF in Japan.

<Domestic pigs>

(1) Surveillance methods

In addition to CSF surveillance, antigen tests are conducted using samples derived from domestic pigs and submitted for pathological appraisal.

① Periodic on-site inspections of farms

Each prefecture's conducts on-site inspections at swine farms once a year to check the clinical condition.

If abnormalities such as cyanosis or fever are observed, ASF testing is undertaken in addition to CSF testing.

② Testing of samples submitted for pathological appraisal

When pathological appraisal was conducted by LHSC upon producers' request, samples are also tested for ASF in addition to CSF.

(2) Surveillance results

① Periodic on-site inspections of farms

In FY2023, on-site inspections were conducted on 2,816 farms (preliminary figures), and no abnormalities were found.

② Testing of samples submitted for pathological appraisal

In FY2023, tests were conducted on 380 animals in 193 farms with (preliminary results), and all results were negative for ASF.

<Wild boar>

(1) Surveillance methods

Tests for ASF were conducted on wild boars found dead or captures using the samples collected for testing for CSF.

(2) Surveillance results

In FY2023, 620 dead boars and 26,968 captured boars were tested, with all results negative for ASF.