

2-10 Other Surveillance

Wildlife Surveillance

Wild animals have been considered one of the sources of infection in livestock. Even if the disease is eradicated among livestock, the disease may be maintained among wild animals. For this reason, it is necessary to study the status of animal infectious diseases in wild animal populations. MAFF is conducting surveillance of wild animal species for infectious diseases relevant to the livestock sector.

(1) Johne's disease surveillance targeting wild sika deer

From FY 2016 to FY 2023, 1,794 samples (fecal matter) were tested for Johne's disease. 31 samples were

determined to be qualitatively positive (i.e., MAP gene was detected with low concentration). 8 samples were determined as quantitative positive (i.e., MAP gene was detected above the reference level), and out of them, 3 samples were confirmed positive by fecal culture (Chart 2-10-1).

(2) Chuzan disease surveillance targeting wild sika deer

1,156 samples (sera) collected between FY 2017 and FY 2022 were tested for antibodies for Chuzan disease virus, and 6 samples from 6 prefectures (Saitama, Nara, Nagasaki, Kyoto, Kumamoto, and Ishikawa) were antibody positive. In all cases, antibody titers were low, ranging from 1:16 to 1:32.

(3) Chronic Wasting Disease (CWD) test for wild sika deer

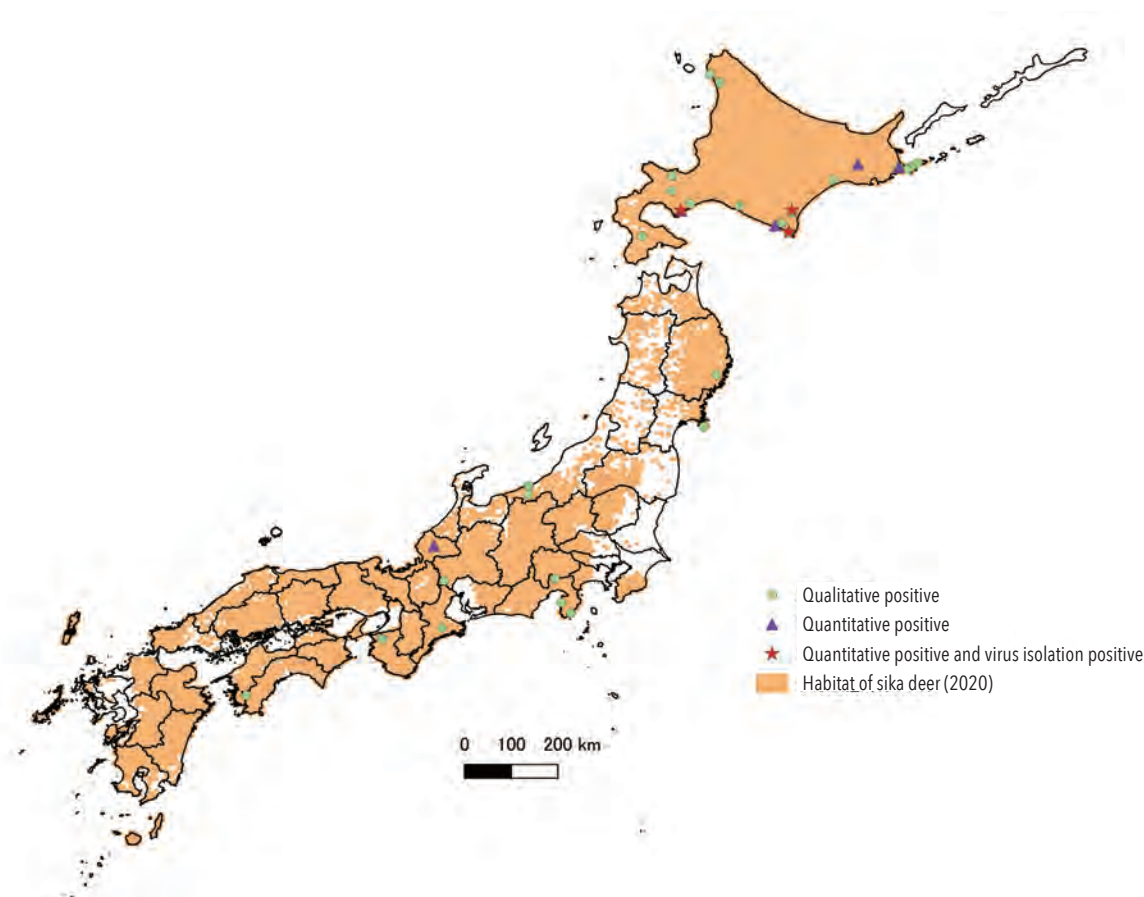
Of the samples collected in FY2023, 80 samples (medulla oblongata) were tested for CWD, and all tested negative.

(4) Aujeszky's disease surveillance targeting wild boars

Aujeszky's disease is a swine disease that is designated as a notifiable infectious disease. Major clinical signs are abortions in pregnant sows, neurological

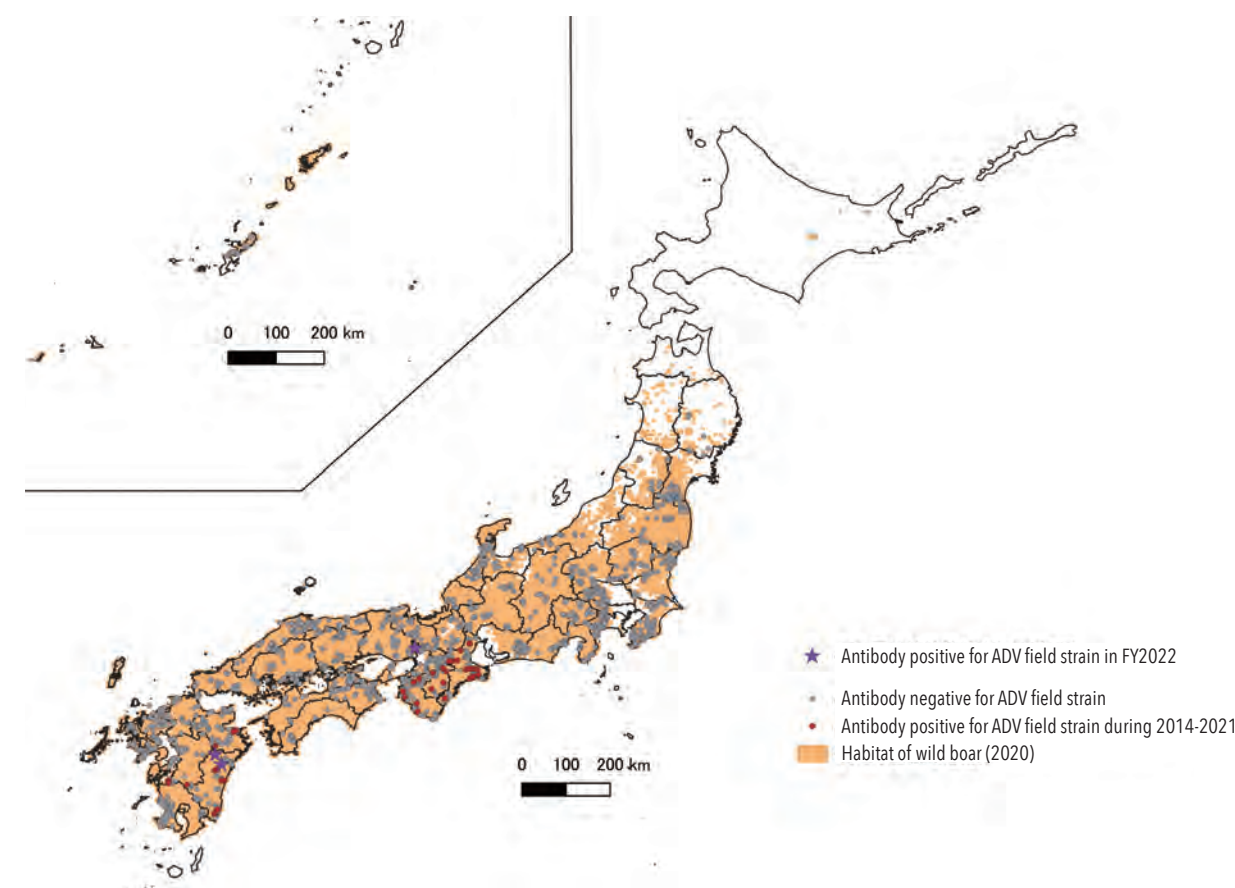
symptoms, and high mortality in young piglets. Japan has been pursuing eradication based on disease control guidelines, and no outbreaks have been reported in domestic pigs since 2017. With regard to wild boars, a total of 358 samples collected in 36 prefectures were tested for Aujeszky's disease, and 3 samples collected in 2 prefectures (1 sample in Osaka and 2 samples in Miyazaki) were confirmed positive for antibodies in FY2022 (Chart 2-10-2). Tests are ongoing as of the end of FY2023.

Chart 2-10-1 Johne's disease surveillance in sika deer (2016-2023)



(Note: Habitat of sika deer is based on data published by the Ministry of the Environment (<https://www.env.go.jp/press/109239.html>))

Chart 2-10-2 Aujeszky's disease surveillance in wild boars (FY 2018-2022)



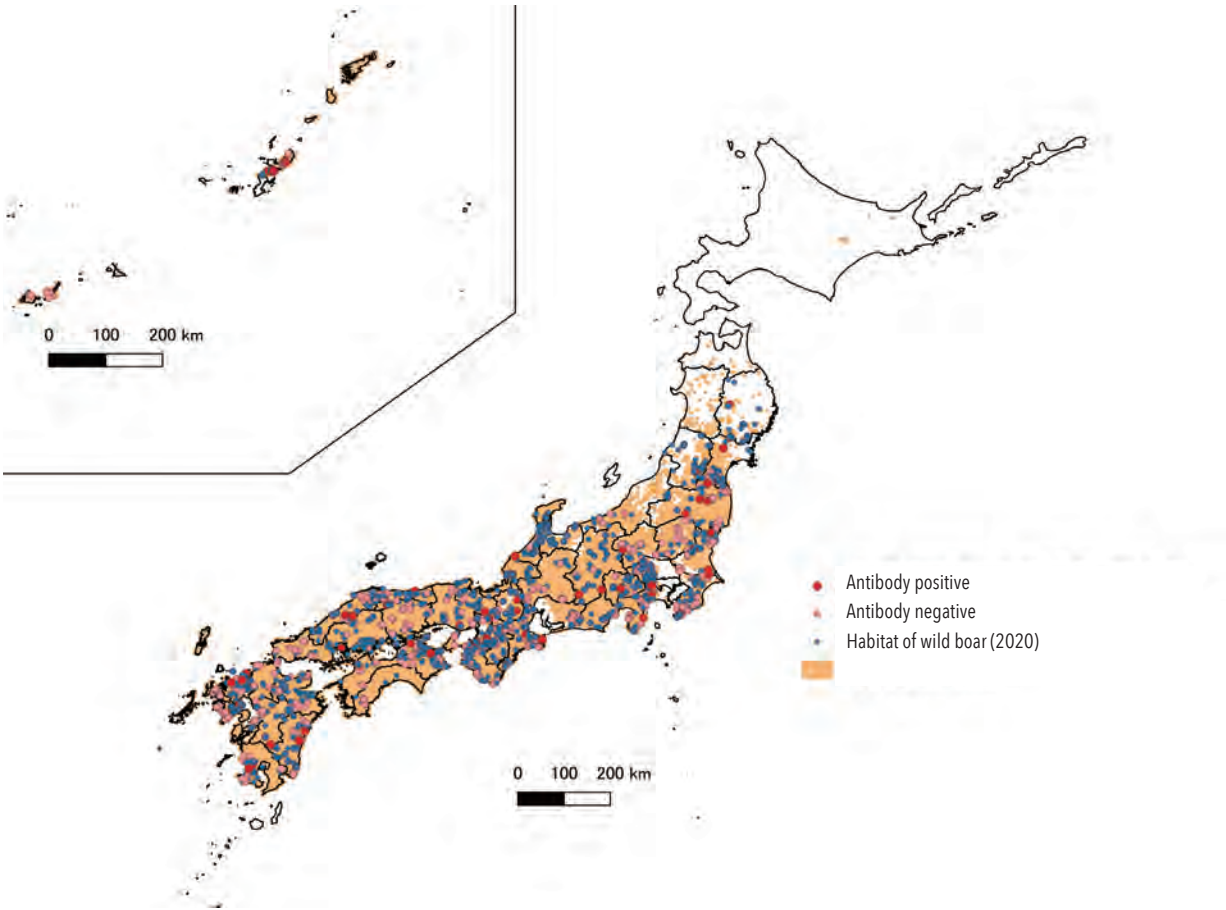
(Note: Habitat of wild boar is based on data published by the Ministry of the Environment (<https://www.env.go.jp/press/109239.html>). Although the map indicates wild boar habitat includes Hokkaido, according to Hokkaido, they originated from a captive boar-pig hybrid, and no wild boars in their natural state have been confirmed in Hokkaido.)

(5) Toxoplasmosis surveillance in wild boars

Toxoplasmosis is a zoonosis caused by infection with the protozoa, *Toxoplasma gondii*. The main clinical signs of infected animals are fever, diarrhea, and dyspnea etc. In Japan, toxoplasmosis is designated as a Notifiable infectious disease in pigs, boars, sheep, and

goats, and it occurs in domestic pigs only in a limited number of prefectures. Serological testing of wild boars has been conducted since FY2014, and 22 out of 320 samples from wild boars collected in 32 prefectures were positive, and at least one sample in 17 prefectures was positive in FY 2023.

Chart 2-10-3 Toxoplasmosis surveillance in wild boars



(Note: Habitat of wild boar is based on data published by the Ministry of the Environment (<https://www.env.go.jp/press/109239.html>). Although the map indicates wild boar habitat includes Hokkaido, they originated from a captive boar-pig hybrid, and no wild boars in their natural state have been confirmed in Hokkaido.)

Appendixes