Updated Outbreak Assessment #4

African swine fever in South East Asia

22nd February 2019 Ref: VITT/1200 ASF in South East Asia

Disease report

Since our last report, China has reported new outbreaks of ASF in domestic pigs, and Mongolia and Vietnam have now reported their first outbreaks of ASF in domestic pigs. The Chinese authorities reported the first outbreak of ASF in domestic pigs in Liaoning region, north east China on 3rd August 2018. Since then, a total of 112 outbreaks in domestic pigs have been reported in 26 provinces. See map for location of the outbreaks (OIE, 2019). Disease control measures are in place including culling affected and susceptible animals.
Situation assessment

China
A total of 112 outbreaks in domestic pigs, and one reported case in a dead wild boar have been reported by the Chinese authorities since August 2018. Twenty-six provinces have now reported ASF in domestic pigs. Affected provinces include: Anhui, Heilongjiang, Henan, Jilin, Liaoning, Jiangsu, Zhejiang, Shanxi, Yunnan, Hunan, Guizhou, Hubei, Jiangxi, Fujian, Sichuan, Shaanxi, Qinghai, Guangdong, Gansu, Guangxi, Tianjin, Chongqing, Shandong, Shanghai and Beijing Municipalities, and Inner Mongolia Autonomous Region. More than 916,000 pigs have been culled. Of note, in Jiangsu Province, ASF outbreaks were reported in two farms owned by one company in January. According to a media report, this was the single largest breeding pig company in China, with production capacity of 100,000 breeding pigs and 200,000 commercial pigs. A growing number of countries are reporting detection of ASF virus in seized pork products originating from China, which highlights the role of humans in spreading ASF to unaffected countries. In January, Australian media reported that ASFV has been found in six pork products seized at Australian airports and mail processing centres, but details of dates and the origins of the consignments were not given.

Taiwan
In addition to the high incidence of disease reported on China's mainland, there were unofficial media reports in January from Taiwan of dead pigs, testing positive for ASFV, being found on the shores of its islands close to the Chinese mainland. In December 2018, a dead pig was found washed up on a beach in Taiwan's Kinmen Islands, about 10 km (6.2 miles) from China's Fujian province, where ASF was reported earlier that month. Although the carcass tested positive for ASF, nearby farms were not affected. Taiwanese media has also reported detection of ASFV contamination in pork seized from passengers coming from mainland China and carrying pork products illegally. Taiwan remains officially free from ASF, and no reports of disease in domestic pigs or wild boar have been made to OIE.

Vietnam
Three outbreaks of ASF in domestic pigs were reported on 20th February in two regions of the country (OIE, 2019). The two affected provinces, Hung Yen and Thai Binh are located southeast of Hanoi in northern Vietnam approximately 100 miles (160 km) from the Chinese border. The two Chinese provinces bordering Vietnam have reported ASF outbreaks; Guangxi reported its first outbreak in February 2019. The other neighbouring province, Yunnan, reported its first ASF case in October 2018. Vietnam's domestic pig population is around 30 million and, although the pig industry has been developing, there are many pigs in small herds. Both provinces affected in Vietnam form part of the Red River Delta which is a key region for pig production (Strak, 2015). There is also a
considerable wild boar population. The OIE report indicates that herd sizes of these first ASF cases in Vietnam ranged from 33 to 123.

**Mongolia**

Since 15\textsuperscript{th} January when Mongolia reported its first case of ASF, ten outbreaks have been reported in backyard pig herds in four provinces, and in the capital Ulaanbaatar. The affected provinces are Bulgan and Orkhon in the north, Tuv in the central of the country, and Dundgovi in the south. It is unclear how long the virus may have been in pigs in Vietnam, and whether wild boars are involved.

**Other factors**

Eurasian wild boar are distributed throughout much of south-east Asia. Although humans are likely to be implicated in introduction of ASF to new geographic areas and countries if contaminated meat brought in is consumed by pigs or wild boar, if wild boar become infected, they are likely to contribute significantly to further spread within south-east Asia. In addition, there are other wild suids to consider which may be present in China and south-east Asia, together with \textit{Ornithodoros} argasid soft tick species which can act as vectors of ASF allowing virus to persist in infected areas. The presence of ASFV into China, Mongolia, Vietnam and potentially further into south-eastern Asia represents an increasing new threat for the pig population and pig production in this region.

ASF virus can remain viable in raw pork or cured meats for several months. Illegal or uncontrolled imports of pig meat products, both accidentally or intentionally, by tourists, farm workers, exchange students or hunters, and bringing with them meat products for personal or commercial use, presents a continuous threat. The FAO reports that heightened attention is necessary due to the movement of people, pork products and animals related to celebration of the Chinese New Year.

Presence of concurrent classical swine fever (CSF) or porcine epidemic diarrhoea (PED) where these occur, or co-circulation with other diseases may complicate early detection and reporting of ASF.

The overall risk to the UK given the current distribution of ASF in the EU and neighbouring countries is still \textbf{medium}. With ASF established in Eastern Europe, there are ongoing concerns around pork products from non-EU countries entering the EU in passenger luggage and then being discarded in areas where wild boar or domestic pigs are present. With direct flights to the EU and UK from China and southern Asia, there is a risk of entry of ASFV in POAO from Asia.

Publicity campaigns are in place to inform the public and discourage individuals from bringing pork products into UK, with targeted messages to key people such as road hauliers, hunters, pig keepers and veterinarians. See:
Conclusion

The risk of ASF introduction to the UK was raised to medium in August 2018. This reflected the spread of ASF westward from Eastern Europe. Despite the spread of ASF to China, the current risk of ASF introduction to the UK is still considered to be medium although the situation is being kept under review and depends on how ASF spreads both within China and across other parts of south-east Asia.

We would like to highlight to all pig keepers and the public to ensure pigs are not fed catering waste, kitchen scraps or pork products, thereby observing the swill feeding ban. All pig keepers should be aware that visitors to their premises should not have had recent contact with pigs and pig premises in the affected regions. Anybody returning from any ASF-affected area should avoid contact with domestic pigs, whether commercial holdings or smallholdings, areas with feral pigs or wild boar, until they are confident they have no contaminated clothing, footwear or equipment. Pig keepers and veterinarians should remind themselves of the clinical signs for ASF. Any suspect cases must be reported promptly. Please see https://www.gov.uk/guidance/african-swine-fever for more information.

We would like to remind the public that any feeding of meat products, including the feeding of swill, kitchen scraps and catering waste, to wild boar or feral pigs is also illegal. A poster reminding pig keepers of this is available: http://apha.defra.gov.uk/documents/surveillance/diseases/african-swine-fever-poster.pdf

We will continue to monitor the situation.

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References

All disease reports are available from the OIE WAHIS database.