Department for Environment, Food and Rural Affairs
Animal and Plant Health Agency
Advice Services - International Disease Monitoring

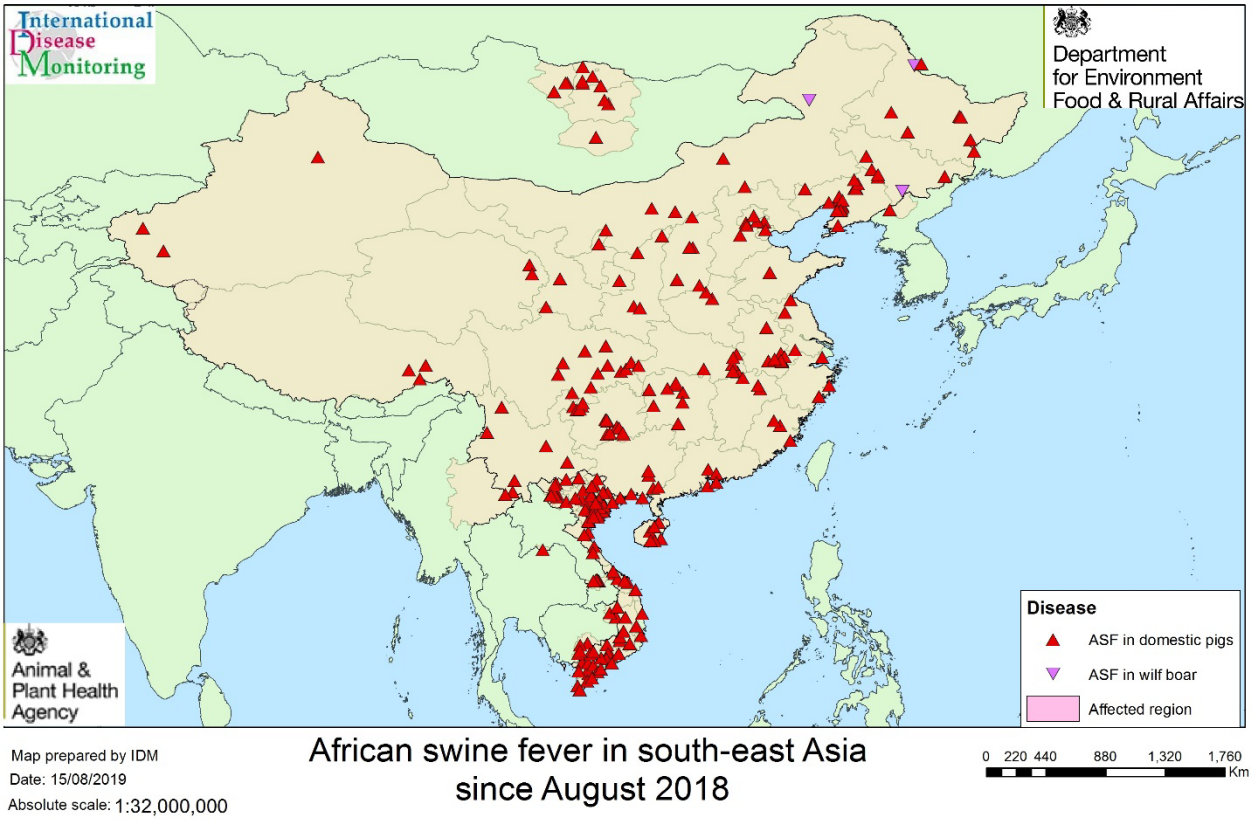
Updated Outbreak Assessment #10

African Swine Fever (ASF) in South East Asia

15 August 2019 Ref: VITT/1200 ASF in South East Asia

Disease report

Since our last report on 15 July, China, Cambodia, Laos and Vietnam have reported more outbreaks in domestic pigs. Additionally, cases have now been reported in the eastern Shan State district of Myanmar, close to the Thai border, followed by reported culling of 2,000 animals for disease control. In total, almost 5 million pigs have died or been culled across Asia due to ASF, representing more than 10% of the total pig population in each of China, Vietnam and Mongolia. This has resulted in severe economic losses to the pig sector, and may lead to an increase in poultry production in these areas. Following this, the risk to humans in these areas from transmission of highly pathogenic avian influenza may increase (FAO, July 2019a).



The map shows the ASF outbreaks in domestic pigs and cases in wild boar since August 2018.

Situation assessment

China

The Chinese authorities reported the first outbreak of ASF in domestic pigs on 3 August 2018. Since then, a total of 151 outbreaks in domestic pigs have officially been reported. See above map for location of the outbreaks (OIE, 2019). Since our last report on 15 July, six new outbreaks have been reported in domestic pigs; including a farm in Sichuan and a village in Hubei. The remaining four outbreaks were reported at toll stations, highway checkpoints for animal health supervision, in Liaoning (3) and Guangxi (1), where the illegal movement of animals were identified. Though the number of outbreaks reported since our last report on the 15 of July continues to be low, movement of diseased animals appears to be occurring in the country, which could contribute to further spread.

During a teleconference called by the Ministry of Agriculture and Rural Affairs for China (MARA), the importance of 'grassroots' prevention and control mechanisms was reiterated, and also stressed cracking down on violations (such as illegal movements) (FAO, 2019). So far, more than 1.1 million pigs have been culled in efforts to prevent further spread of the disease.

Vietnam

The first case of ASF in Vietnam was reported in early February 2019; since then over 2,700 outbreaks have been reported. ASF outbreaks have now been reported in all provinces and the majority of municipalities across the country, resulting in the culling of more than 3 million pigs (OIE, FAO).

Since our last report on 15 of July, Vietnam has changed its reporting strategy to OIE and now reports outbreaks clustered by the first administrative division, and has reported 194 outbreaks in two clusters in this time period. The outbreak clusters have been reported in villages in Dien Bien (83), close to the border with Laos, and Ha Nam (111) in the north east of the country, resulting in the culling or death of over 126,000 pigs. Control measures and directives continue to be implemented.

Laos

Laos reported its first outbreaks of ASF on 20 June 2019, since then a total of 10 outbreaks have been reported, including two outbreaks in villages in Saravane province since our last report on 15 July; resulting in the death or culling of over 1,400 pigs.

Cambodia

Cambodia reported its first outbreak of ASF in domestic pigs, in a backyard farm in Rattanakiri province on 23 March 2019. Since our last report on 15 July, there have been two more outbreaks reported in domestic pigs in villages in the Kampong Chang Province. Cambodia has implemented movement control of live pigs, pork and pork products, while stamping out, disposal and disinfection were implemented in affected villages. Additionally the Cambodian Prime Minister issued guidance urging necessary measures for prevention and control to be taken in the country and in neighbouring countries (FAO, 2019).

Myanmar

The detection of ASF virus in dead pigs in the Mong La region, in the Shan State of Myanmar and in close proximity to the Thai border, has now been confirmed (OIE; Chiang Rai Times, 2019; The Irrawaddy, 2019). This is now being investigated by the FAO. The District Veterinary Officer and Township Veterinary staff conducted sampling in the area and concluded that the import of infected pigs and pork products had likely occurred, rather than a wild boar source of infection.

In the nearby town of Tachileik, suspected ASF infected dead pigs were reportedly found floating in the river. Samples are still being tested to confirm ASF, which, if positive, could have consequences for disease spread. In response, more than 2,000 pigs have been culled to prevent potential spread of disease. This is the first time ASF has been reported in the country and demonstrates another, if unsurprising, geographical jump for the virus, and puts further pressures on Thailand's borders (where imports of pork from China and Laos have already been banned as a preventative measure). Further control measures have been put in place, including movement controls, tracing, surveillance and stamping-out. The arrival of ASF here could have a significant impact on the poorer Myanmar farmers, where biosecurity is less efficient and feeding of kitchen waste to pigs occurs (FAO, July 2019b)

Taiwan

Taiwan remains officially free from ASF, and no reports of disease in domestic pigs or wild boar have been made to OIE, though an ASF infected pig was washed up on to its shores in May (FAO). Though an island, the country remains at high risk of infection via human mediated routes; ASF infected pork products from China have previously been confiscated from air travellers (Taipeitimes). In an effort to combat this, Taiwan have increased the fine for bringing in pork products from Myanmar, following the detection of ASF (FocusTaiwan, 2019)

Hong Kong, North Korea and Mongolia

Since our last report on 15 July, there have been no further outbreaks of ASF reported in: North Korea, Hong Kong or Mongolia, though the virus is likely still circulating in these areas. We will continue to monitor the situation.

Other factors

The confirmation of African Swine Fever Virus (ASFV) in China, Mongolia, Vietnam, Cambodia, Hong Kong, North Korea, Laos and now Myanmar, shows the potential for further spread into the domestic pig and wild suid populations in south-eastern Asia, where the presence of soft-bodied argasid ticks could also hinder eradication if found to be able to transmit ASFV. In China, for example, there are 13 species of argasid ticks (Yu et al. 2015) belonging to three genera: *Argas* (seven species), *Carios* (four species), and *Ornithodoros* (two species).

Furthermore, there is currently no vaccine available against ASF, and though work is continuing in this area, it is likely to be several years before a safe and effective ASF vaccine is ready for deployment in the field.

The epidemiological situation of ASF across South East Asia remains of concern; new outbreaks continue despite the control campaigns implemented, which are possibly a reflection of illegal movements of both animals and pork products.
The overall risk to the UK given the current distribution of ASF in Belgium, Eastern Europe and neighbouring countries is still **medium**. 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 regular direct flights to the EU and UK from China and eastern Asia, there is a risk of entry of ASFV in products of animal origin (POAO) from Asia. Numerous media accounts in 2019 have reported the movement of illegal pork products and ASF infected pork products from China; most recently a Vietnamese student was arrested for illegally carrying ASF contaminated pork rolls to Japan, with the intention of selling online (Pig-world, 2019). In June 2019, ASF contaminated products were seized in Northern Ireland, which further underlines the potential risk to the UK from pork and pork products being brought illegally into the country.

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: http://web.oie.int/rr-europe/eng/regprog/en_asf_depository.htm, and, https://pork.ahdb.org.uk/health-welfare/health/emerging-diseases/african-swine-fever/

Conclusion

The risk of ASF introduction to the UK was raised to **medium** in August 2018 as a result of the number of outbreaks of ASF being reported in Eastern Europe, and subsequent detection of ASF in wild boar in Belgium in September 2018. Despite the spread of ASF to China, Mongolia, Vietnam, Cambodia, Hong Kong and North Korea, Laos and Myanmar, the current risk of ASF introduction to the UK is still considered to be **medium,** although the situation is being kept under review.

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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All disease reports are available from the OIE WAHIS database.

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