# **Updated Outbreak Assessment #7**

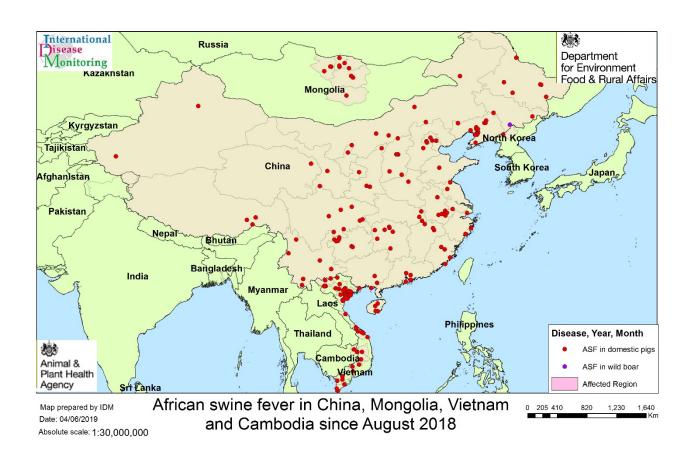
# African Swine Fever (ASF) in South East Asia

4 June 2019

Ref: VITT/1200 ASF in South East Asia

# Disease report

Since our last report on 14th May, China and Vietnam have reported more outbreaks in domestic pigs, Hong Kong have reported a second outbreak in a slaughterhouse, and North Korea has now reported its first outbreak of ASF in domestic pigs in a village close to the Chinese border. Disease control measures are in place, including culling affected and susceptible animals.



# Situation assessment

# China

The Chinese authorities reported the first outbreak of ASF in domestic pigs on 3<sup>rd</sup> August 2018. Since then, a total of 142 outbreaks in domestic pigs have been reported. See above map for location of the outbreaks (OIE, 2019). Since our last report on 14th May, seven new outbreaks in domestic pigs; three in commercial farms, three in backyard holdings and one in a slaughterhouse, have been reported by the Chinese authorities. As well as direct and arthropod vector routes of transmission, contaminated animal feed ingredients and fomites have the potential to be pathways for ASF.

# **Hong Kong**

Hong Kong reported its first outbreak of ASF in domestic pigs at a slaughterhouse on 10<sup>th</sup> May 2019, after which time control measures were implemented to reduce spread, such as enhanced surveillance and movement controls. Since our last report on 14<sup>th</sup> May, one more outbreak has been unofficially reported in a slaughterhouse in the New Territories, bordering China's southern province of Guangdong, resulting in 4,700 animals being culled (Empres-i).

#### **Taiwan**

Taiwan remains officially free from ASF, and no reports of disease in domestic pigs or wild boar have been made to OIE. However, a dead pig found washed up on Shi Shan beach, Jinsha Township, Jinmen County, Taiwan Province on 21st May, and tested positive for ASF by PCR. The surrounding farms were also tested, but no positive results were found (FAO; PigProgress).

# Vietnam

The first case of ASF in Vietnam was reported in early February 2019, and since our last report on 14<sup>th</sup> of May, an additional 2,571 outbreaks in swine from 46 clusters have been reported in 10 new provinces. Forty-five of these were in villages, with one outbreak reported in a slaughterhouse in the south of the country, resulting in the culling of over 1.5 million pigs. ASF outbreaks have now been reported in 44 of the 64 provinces and municipalities across the country, including each of the Northern provinces. The Ministry of Agriculture and Rural Development (MARD) has issued new guidance on pig slaughter and pig products (3708/HD-BNN-TY, 28th May), including: pig transport, cleaning and disinfecting procedures for facilities and vehicles, and increased ASF testing and quarantine certificates. Pork accounts for 3/4 of total meat consumption in Vietnam, and most of its 30 million farm-raised pigs are consumed domestically, roughly 5.7% of which have been lost due to disease and control measures.

# Mongolia

There have been no new outbreaks reported in March, April or May. The last outbreaks were in backyard pigs in early February. To date, 11 outbreaks have been reported in Mongolia: in Bulgan, Darkhan-Uul, Dundgovi, Orkhon, Selenge, and Tov provinces and

Ulaanbaatar, involving a total of 105 farms/households. According to media sources, more than 10% of the total pig population in Mongolia have died or been destroyed due to the ASF outbreaks.

# Cambodia

Cambodia reported its first outbreak of ASF in domestic pigs in a backyard farm in Rattanakiri province on 23rd March 2019. This was on the eastern border with Vietnam and in this respect was not surprising, although it does represent a jump south if cases are linked epidemiologically across the border. Since our last report on 14th May, there have been no more outbreaks reported.

# **North Korea**

North Korea reported its first outbreak of ASF in domestic pigs in a village in the Chagang-Do Province on 30<sup>th</sup> May 2019, close to the Chinese border. The appearance of the disease here is not completely unexpected as cases have been reported in China in wild boar in close proximity to the North Korean border. A total of 99 animals have been culled and control measures have been applied such as movement controls inside the country and increased surveillance in the surrounding areas.

# Other factors

The presence of African Swine Fever Virus (ASFV) in China, Mongolia, Vietnam, Cambodia, now Hong Kong and now North Korea 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).

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 POAO from Asia. Recent media accounts, in New Jersey (USA) in March and Japan in January, reported the movement of illegal pork products and ASF infected pork products from China in these countries respectively.

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: <a href="http://web.oie.int/rr-europe/eng/regprog/en\_asf\_depository.htm">https://web.oie.int/rr-europe/eng/regprog/en\_asf\_depository.htm</a>, and, <a href="https://pork.ahdb.org.uk/health-welfare/health/emerging-diseases/african-swine-fever/">https://pork.ahdb.org.uk/health-welfare/health/emerging-diseases/african-swine-fever/</a>

# Conclusion

The risk of ASF introduction to the UK was raised to **low** in August 2017. This was because, despite the relatively low level of legal trade in live pigs or commercially produced pig products, there could be a risk from the fomite pathway involving movement of people and vehicles from affected Eastern EU countries and there was evidence of contaminated / infected non-EU origin pig products being detected in the EU. With the number of outbreaks of ASF being reported in Eastern Europe in August 2018, and subsequent detection of ASF in wild boar in Belgium in September 2018, the risk to the UK was elevated to **medium**. Despite the spread of ASF to China, Mongolia, Vietnam, Cambodia, Hong Kong and North Korea, 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 <a href="https://www.gov.uk/guidance/african-swine-fever">https://www.gov.uk/guidance/african-swine-fever</a> 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.

# **Authors**

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# References

All disease reports are available from the OIE WAHIS database.

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