

## Updated Outbreak Assessment #9

# African Swine Fever (ASF) in South East Asia

15 July 2019

Ref: VITT/1200 ASF in South East Asia

## Disease report

Since our last report on 25th June, China, Laos and Vietnam have reported more outbreaks in domestic pigs, and Cambodia has reported the disease for the first time since April; in the Kampong Cham, Svay Rieng and Takeo Districts, close to the Vietnam border. Disease control measures are in place, including culling affected and susceptible animals.



Map prepared by IDM  
Date: 15/07/2019  
Absolute scale: 1:30,000,000

African swine fever in China, Mongolia, Vietnam and Cambodia since August 2018

0 205 410 820 1,230 1,640 Km

## 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 145 outbreaks in domestic pigs have officially been reported. See above map for location of the outbreaks (OIE, 2019). Since our last report on 25th June, four new outbreaks have been officially reported in domestic pigs; in farms in Guangxi (2) and Hubei (1), and one outbreak in a slaughterhouse in the Shapotou District

in central China. Following the outbreak, the remaining 60 pigs at the slaughterhouse and 82 pigs on the relevant farm were culled.

The number of outbreaks reported since our last report on the 25<sup>th</sup> of June continues to be low, though it is as yet still unclear whether this is part of a trend or complicated by under-reporting. As well as direct and arthropod vector routes, contaminated animal feed ingredients and fomites have the potential to be pathways for ASF transmission.

Following a Q&A on 4<sup>th</sup> July 2019, the Vice Minister of the Ministry of Agriculture and Rural Affairs for China (MARA) stated that the epidemic had slowed, though the situation is still complicated and difficult. According to MARA's monitoring, the live pig stocks fell by 4.2% in May, down by 22.9% from last year. To support recovery and development of pig production, MARA will provide temporary assistance and speed up subsidies awarded to pig farmers for mandatory culling due to ASF. Additionally, the Epidemic Zone in Aba Prefecture, Sichuan Province, was lifted on 4<sup>th</sup> July 2019, while the Epidemic Zones in Huinong District, Shizuishan City, Ningxia Hui Autonomous Region and Daishan County, Wenshan Prefecture, Yunnan Province were lifted on 9<sup>th</sup> July, as no new cases were reported in the affected areas for six weeks (FAO July 2019).

## **Hong Kong**

Hong Kong reported its first outbreak of ASF in domestic pigs at a slaughterhouse on 10<sup>th</sup> May 2019. Control measures including enhanced surveillance and movement controls remain in place. There have been no new outbreaks in June or July, to date.

## **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 was found washed up on Shi Shan beach, Jinsha Township, Jinmen County, Taiwan Province on 21<sup>st</sup> May, and tested positive for ASF by PCR, which was found to be 100% homologous with ASF reported in parts of China via sequence analysis (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).

## **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 25<sup>th</sup> of June, just two outbreaks have been reported, both in back yard pigs in villages. Following control measures and directives which have been put in place, the number of reported cases appears to be slowing, though it is still unclear whether this is part of a trend. We will continue to monitor the situation.

## **Laos**

Laos reported its first outbreak of ASF on 20<sup>th</sup> June 2019, with seven outbreaks in domestic swine in the Saravane province in the south of the country. The outbreaks are unsurprising given the current disease situation in Vietnam. Though it has not yet been

confirmed, the source of infection in this instance is less likely to be wild boar, given trade routes which may facilitate the movement of domestic pigs across the border. Since our last report on 25<sup>th</sup> of June there has been one new outbreak in domestic pigs in Laos' capital Vientiane, close to the Thai border.

## **Mongolia**

The last reported outbreaks were in backyard pigs in early February. To date, 11 outbreaks have been reported in Mongolia, involving a total of 105 farms/households.

## **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 25th June, there have been four more outbreaks reported in domestic pigs, all in villages. Two were in a village in the Kampong Cham Province, one in Svay Rieng, close to the Vietnam border, and one in Takeo; all are in the south of the country. This is not unexpected given the number and close proximity of outbreaks reported by Vietnam (see map). Cambodia has implemented movement control of live pigs, pork and pork products, while stamping out, disposal and disinfection were implemented in affected villages.

## **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 was not completely unexpected as cases have been reported in China in wild boar in close proximity to the North Korean border. There have been no further cases since our last report on 25<sup>th</sup> June and control measures are still in place.

## **Other factors**

The presence of African Swine Fever Virus (ASFV) in China, Mongolia, Vietnam, Cambodia, Hong Kong, North Korea and Laos, 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. Elsewhere, the European Commission has funded a Spanish consortium to develop a live attenuated vaccine suitable for use in the EU. However, it is likely to be several years before a safe and effective ASF vaccine is ready for deployment in the field.

Though China and Vietnam have reported lower numbers of cases than in previous months, it remains to be seen if this is part of a general trend and whether disease is genuinely decreasing in these areas. 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. In June 2019, as part of their routine activities, port authorities in Northern Ireland seized a total of 300 kg of meat and dairy products illegally brought into NI by passengers during the month. A sample of one of these seizures; a sausage originating from Asia, was tested at the Agri-Food and Biosciences Institute (AFBI), resulting in the detection of ASF virus DNA fragments. Though the presence of ASF DNA does not necessarily mean that the meat was infectious, it 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](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, and now Laos, 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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## References

All disease reports are available from the OIE WAHIS database.

Yu et al. (2015) Tick-borne pathogens and the vector potential of ticks in China. *Parasites & Vectors*, 8:24.

FAO

(2019) [http://www.fao.org/ag/againfo/programmes/en/empres/ASF/Situation\\_update.html](http://www.fao.org/ag/againfo/programmes/en/empres/ASF/Situation_update.html)

[FAO \(May, 2019\) http://www.fao.org/3/ca4526en/ca4526en.pdf](http://www.fao.org/3/ca4526en/ca4526en.pdf)

Pig Progress (2019) <https://www.pigprogress.net/Health/Articles/2019/5/ASF-Vietnam-Virus-in-10-new-provinces-culls-rise-to-16m-432662E/>

Profarmer (2019) <https://www.profarmer.com/index.php/markets/news/dim-sums-pig-number-landslide-reported-chinese-provinces>

Taipeitimes

(2018) <http://www.taipeitimes.com/News/taiwan/archives/2018/12/22/2003706580>



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