

Updates on African Swine Fever (ASF) in Hong Kong SAR

OIE Meeting of Standing Group of Expert on ASF
30 – 31 July 2019



Pig Farms in Hong Kong

- 43 licensed pig farms, mainly small (<1000 head) and medium (1000- 2000)
 - rearing about 60,000 pigs at present (total rearing capacity 74,640 pigs).
- The farm sector employs some 220 farm workers but “hot meat” sales employs thousands of meat traders and butchers
- Around 5% of fresh pork produced in Hong Kong (by weight) – 95% from mainland
- 2% of total pork, 50% from mainland, significant quantities from Vietnam (suckling pigs for banquets)
- Limited in space to enhance stricter hygiene and biosecurity measures
- Swill feeding is banned since early 2019



Import of Live Pigs

- Imported live pigs must originate from registered farms approved by The General Administration of Customs of the People's Republic of China (GAC)
- Registered farms have to attain the stipulated hygiene standards and have implemented detailed disease surveillance and control programmes supervised by on-farm veterinarians
- Guangdong Province in China is the largest source of live pigs supplied to Hong Kong, accounting for over half of the market share
- Since the outbreaks in August 2018 in Mainland China, the GAC and the Ministry of Agriculture and Rural Affairs (MoARA) have been stepping up control
- Hong Kong is unique. Demand for hot meat requires import of live pigs for slaughter (local farms cannot meet demand)
- Prior to the outbreak approximately 4500 live pigs were slaughtered each day
- Two major slaughterhouses but 90% of pigs are processed in the one in Sheung Shui



Detection of ASF in Hong Kong

- ASF has been detected in pigs on two occasions (10 May 2019 and 1 Jun 2019) in the Sheung Shui slaughterhouse.
- On both occasions all pigs in the slaughterhouse were culled.
- Operation of the slaughterhouse was suspended until the completion of the disinfection work. Highly disruptive to the trade.
- Import of pigs and fresh pork supply have dropped by more than half since then.



Current Reality

- Hong Kong is **heavily reliant on import** of live pigs and pig products
- The exact extent and distribution of the virus in the Mainland is not known. Available evidence suggests that, currently, the virus is widespread in Guangdong province
- Recognise that *“China is going to deal with this African swine fever for many years to come” (Matthew Stone OIE)*
- It is highly likely that other **undetected incursions** into Hong Kong slaughterhouses have occurred
- It is **necessary to accept** that some of the imported pigs and pig products from the Mainland and other ASF affected countries to Hong Kong may contain ASF virus
- To balance the need to maintain market supply of “hot meat” and protecting local farms from infection



Consideration of International Practices

- OIE states that: *“During outbreaks and in affected countries, control of African swine fever can be difficult and must be adapted to the specific epidemiological situation.”*
- Hong Kong needs to take it’s unique situation into consideration
- If guidance in the OIE Terrestrial Code on African swine fever were to be followed fully then no live pigs or uncooked pig products would be imported to Hong Kong from places where the virus is present
- This is not possible given the demand for “hot meat” and other pork products that cannot be met locally have no feasible alternative supplies



Diagnostic
ASF may be suspected based on clinical signs but confirmation must be made with laboratory tests, particularly to differentiate it from classical swine fever (CSF). Guidance on diagnostic tests for ASF can be found in the [Manual of Diagnostic Tests and Vaccines for Terrestrial Animals](#).

Prevention and control
Currently there is no approved vaccine for ASF.
Prevention in countries free of the disease depends on implementation of appropriate import policies and biosecurity measures, ensuring that neither infected live pigs nor pork products are introduced into areas free of ASF. This includes ensuring proper disposal of waste food from aircraft, ships or vehicles coming from affected countries and policing illegal imports of live pigs and pork products from affected countries.
[Zoning subunits and in affected countries, control of ASF can be difficult and must be adapted to the specific epidemiological situation.](#)
Classic sanitary measures may be employed including early detection and humane killing of animals (with proper disposal of carcasses and waste), thorough cleansing and disinfection, zoning/compartimentalisation and movement controls, surveillance and detailed epidemiological investigation, strict biosecurity measures on farms.
As observed in Europe and in some regions of Asia, the transmission of ASF seems to depend largely on the wild boar population density and their interaction with low-biosecurity pig production systems. The good knowledge and management of the wild boar population and a good coordination among the Veterinary Services, wildlife and forestry authorities are required to successfully prevent and control ASF.
Depending on the epidemiological situation, the involvement of the soft tick vector should also be considered in the control programme.

Geographical distribution
ASF is present in wild and/or domestic pigs in regions of Asia, Europe and Africa.
[For more detailed information please visit OIE's WAHIS interface.](#)

Latest update: October 2016



Actions taken in Hong Kong slaughterhouses

- When faced with the first incursion of the ASF virus, other countries have applied culling, providing a precedent for the initial response in Hong Kong.
- Previously, some pigs were kept in the slaughterhouse lairage for longer than the incubation period.
- Since these events “all-in-all-out” management is now practiced in the slaughterhouses
- This means that the slaughterhouses are no longer a site for virus propagation
- Cleaning and disinfection is now conducted as a risk reduction measure on a daily basis
- Enhanced cleaning and disinfection will be conducted in areas within the slaughterhouse where any infected pigs are detected in the future



Actions if ASF virus is detected in a slaughterhouse

Given the unique situation in Hong Kong and the infection status in the mainland it is recognised that:

1. **Not all virus incursions to slaughterhouses will be detected.** Therefore culling will not meaningfully reduce the cumulative risk of virus release from the slaughterhouses
2. **Any risk reduction resulting from complete culling will only be very brief,** as long as there is continued importation of live pigs from endemically infected areas once the slaughterhouses reopen
3. Any such culling and the subsequent cleaning/disinfection incident result in cessation of fresh pork meat trade for about a week in Hong Kong, which has **significant economic and social costs for all stakeholders** involved in the fresh pork value chain
4. Any food waste which may contain meat from infected pigs does not pose a direct hazard to local pig farms due to the **ban on feeding of swill**



Actions if ASF virus is detected in a slaughterhouse

6. It is possible that pigs clinically affected with ASF will be detected on repeated occasions, potentially every month, which means a culling response would have to be repeated.
7. No testing or quarantine system can guarantee that all pigs and produce imported to Hong Kong will be free from ASF virus.
8. It is **not cost-effective and logistically feasible** to test every pig or pork product. But even if all pigs were tested some could be incubating the virus and not be detected if tested prior to arrival.
9. All pigs are being “destroyed” on a daily basis (all-in-all-out management), eliminating the risk of cycles of infection developing in the slaughterhouses
10. OIE does not mandate culling as the only approach, but suggests “**Classic sanitary measures may be employed**”

On the basis of the above considerations culling of all pigs in the slaughterhouse following detection of virus will no longer be done.



Actions to protect local farms

Aim: to protect the 43 local pig farms from entry of virus via contaminated objects

- The major **risk pathways for virus transmission to local pig farms** have been identified
- additional risk mitigation measures are being taken to prevent transmission of virus from slaughterhouses to farms:
 1. the **lairages and pig loading areas must be** thoroughly cleaned and disinfected on a daily basis
 2. vehicles used for pig transport must be cleaned and disinfected and subject to inspection
 3. farmers have been advised on appropriate measures for preventing virus entry to their farms and that ASF virus may on occasions be present in slaughterhouses and in wet markets/hot meat outlets



Further risk mitigation measures

1. Introduction of a **central cleansing and disinfection point** for pig-conveying trucks traveling back from slaughterhouses to farms
2. Substantial **improvement on biosecurity** of local pig farms
3. **Additional pre-entry inspection** at Mainland farms and at border by officials for clinically sick pigs will reduce the likelihood of sick pigs entering the slaughterhouses
4. **Sharing of ASF information** between Mainland China and Hong Kong to assist in reducing the likelihood of infected pigs being imported. This information can also be used when conducting additional scientific risk assessments



Thank you

