QUARTERLY EPIDEMIOLOGY REPORT

Country: Hong Kong SAR, China Period: April - June 2007

Multiple species	Number of cases or see below* Month			Effective surveillance system**	Comment Numbers
	April	May	June		
1. Aujeszky's disease	-	-	-	N	
2. Bluetongue	...	...	...	N	
3. Foot and mouth disease (A, O, C, Asia-1)	-	-	+	Y	1
4. Leptospirosis	...	...	...	N	
5. Rabies	(1987)			Y	
Cattle					
6. Bovine brucellosis	...	...	...	N	
7. Bovine tuberculosis	0000	0000	0000	Y	
8. Contagious bovine pleuropneumonnia	0000	0000	0000	N	
9. Enzootic bovine leukosis	...	...	...	N	
10. Haemorhagic septicaemia	...	...	...	N	
11. IBR/IPV	...	...	...	N	
12. Rinderpest	(1950)			N	
Sheep and goat					
13. Caprine arthritis/encephalitis	...	...	...	N	
14. Contagious caprine pleuropneumonia	0000	0000	0000	N	
15. Maedi-visna	0000	0000	0000	N	
16. Ovine pulmonary adenomatosis	0000	0000	0000	N	
17. Peste des petitis ruminants	0000	0000	0000	N	
18. Scrapie	0000	0000	0000	N	
19. Sheep pox and goat box	0000	0000	0000	N	
Equine					
20. Contagious equine metritis	0000	0000	0000	Y	
21. Equine infectious anemia	(1976)			Y	
21. Equine influenza	(1992)			Y	
23. Equine rhinopneumonitis	-	-	-	Y	2
24. Equine viral arteritis	0000	0000	0000	Y	
25. Glanders	0000	0000	0000	Y	
26. Japanese encephalitis	(2000)			Y	3
Swine					
27. Classical swine fever	-	-	-	Y	4
28. Transmissible gastroenteritis	?	?	?	N	
Avian					
29. Highly pathogenic avian influenza	-	1(1)	3(3)	Y	5
30. Infectious bursal disease (Gumboro disease)	-	-	-	N	6
31. Marek's disease	+	-	-	N	
32. Newcastle disease	+	+	+	Y	7
Lagomorph					
33. Rabbit haemorrhagic disease	...	...	...	N	
34. Fish diseases of importance	-	+	+	Y	8
35. Other diseases of importance	...	...	...	N	

*Please use the following symbols to complete the table:

Codes indicating disease presence

\+ Positive occurrence of the disease

+() Positive occurrence of the disease limited to certain zones/regions of the country

Codes indicating the presence of the infection/infestation

+? Identification of the presence of infection/infestation

Codes indicating disease absence

\- Negative occurrence of the disease

** Existence of effective surveillance system

Yes System exists.

No System does not exist.

Approved by

Name: Dr Thomas Sit

Position: Assistant Director (Inspection and Quarantine)

Signature:

Date: 28 September 2007

1. Epidemiological comments:

Comment No.	**Please give here further details including the numbers of cases and/or outbreaks, locations of outbreaks, sero-types detected, measures taken, etc.**
1	FMD type O is known to occur in pigs in Hong Kong and pigs are routinely vaccinated against type O FMD.
2	Since 1997, horses have been vaccinated against EHV 1 and 4.
3	Vaccination is practised in all equidae against Japanese Encephalitis.
4	Most pigs are vaccinated against classical swine fever.
5	4 cases (3 birds and 1 faecal sample) of highly pathogenic H5N1 virus infection were detected during the reporting period. The species involved are Starling (*Sturnus spp.*), Common Magpie (*Pica pica sericea*), House Crow (*Corvus splendens*) and a surveillance faecal sample collected from a bird cage faecal tray in a pet shop. Source(s) of infection were not determined and no spread was detected. For details of these cases, please refer to the attached appendix 1. Extensive avian influenza surveillance is being conducted throughout Hong Kong all year round. During this reporting period about 12,000 samples, including poultry, dead wild bird carcasses and swabs from various locations were tested. No cases or isolations of highly pathogenic avian influenza viruses occurred on poultry farms, live poultry markets and recreational bird collections. The live poultry markets currently have 2 rest days each month whereby all birds are slaughtered and premises are cleaned and disinfected. In addition to enhanced biosecurity measures on farms and in markets, all local and imported live chickens are vaccinated with a killed H5N2 avian influenza vaccine for H5 avian influenza protection.
6	Extensive surveillance is being conducted as part of the avian influenza surveillance program. Poultry are routinely vaccinated against Infectious bursal disease.
7	Poultry are routinely vaccinated against Newcastle disease.
8	In May, one case of fatal disease caused by Koi Herpesvirus was seen in May affecting Koi carps in a private ornamental fish pond. In June, there were 2 cases of significant viral infections causing mortalities in mariculture fish. (a) One case of Grouper Iridovirus infection complicated by secondary bacterial infection occurred in green grouper fingerlings with morbidity of 100% and cumulative mortality of 30 %. (b) A case of mixed infection with Red Seabream Iridovirus and Redspotted Grouper Nervous Necrosis virus complicated by secondary bacterial infection was seen in 1-month old Leopard Coral Trout in a property with 100 % morbidity and cumulative mortality of 70%.

2. New animal health regulations introduced (with effective date):

Nil

3. Names of countries with which you trade in livestock and its products:

Imports of livestock and livestock products are received from a wide range of countries.

Detection of the HPNAI incident in Hong Kong SAR in 2007 April to June (in chronological order):

	Date of initial detection	Species	Location found (WGS84)	No. of outbreak	Susceptible/ Cases/ Deaths	Destroyed	Slaughtered
1	28 May 2007	Starling (*Sturnus spp., possibly Sturnus sericeus*)	Kowloon City (22° 19' 38" N – 114° 10' 31" E)	1	1/ 1/ 1	0	0
2	4 June 2007	Common Magpie (*Pica pica sericea*)	Sha Tin (22° 22' 34" N – 114° 11' 29" E)	1	1/ 1/ 1	0	0
3	4 June 2007	Bird cage surveillance faecal sample from a pet shop	Mongkok (22° 19' 33" N – 114° 10' 26" E)	1	365/1/0	365	0
4	12 June 2007	House Crow (*Corvus splendens*)	Sham Shui Po (22° 20' 13" N – 114° 09' 08" E)	1	1/ 1/ 1	0	0

Description of the affected populations:

Avian species	World distribution	Status in Hong Kong	Feeding habit	Habitats in Hong Kong
Starling (*Sturnus spp., possibly Sturnus sericeus*)	Resident in most of China south of the Yangtze, including Hainan and west to Sichuan Province. It does not occur in western Yunnan, but appears in Vietnam and Hong Kong in winter, and has occurred as a vagrant in the Philippines and in Japan, where it may now occur annually.	Common winter visitor (widespread)	They feed in trees and on the ground (i.e. fruits & insects).	Inhabits hilly country and low altitude cultivated areas with scattered trees and groves, gardens and scrub, especially by the coast.
Common Magpie (*Pica pica sericea)*	Holarctic	Non-migratory; common widespread resident	Forages in open area and feed on ground; omnivorous.	Inhibits urban areas, parks, and wetlands.
House Crow (*Corvus splendens*)	Indian subcontinent and adjacent areas	Resident population of introduced species	Omnivorous and feeds largely on human scrapes.	Occurs in urban areas; abundant scavenger of human settlements.

Diagnosis:

Laboratory where diagnosis was made: Tai Lung Veterinary Laboratory, Agriculture, Fisheries and Conservation Department, Hong Kong.

Diagnostic tests used: Tests, conducted on cloacal and tracheal swabs or tissues, included chicken embryo inoculation with haemagglutination inhibition test by type specific reference antisera from CVL Weybridge; viral genome detection by real time RT-PCR tests using H5 specific primer sets from SEPRL, Atlanta, Georgia, USA; N1 typing by conventional RT-PCR following procedures from Department of Microbiology, The University of Hong Kong (HKU). Genetic sequencing of the haemagglutinin cleavage site and other genetic characterization were conducted at HKU.