



QUARTERLY EPIDEMIOLOGY REPORT

Country: Hong Kong SAR, China

Period: January – March 2007

Multiple species	Number of cases or see below*			Effective surveillance system**	Comment Numbers
	Month				
	January	February	March		
1. Aujeszky's disease	-	-	-	N	
2. Bluetongue	...	...	...	N	
3. Foot and mouth disease (A, O, C, Asia-1)	1 (2)	-	-	Y	1
4. Leptospirosis	...	...	...	N	
5. Rabies	(1987)			Y	
Cattle					
6. Bovine brucellosis	...	...	...	N	
7. Bovine tuberculosis	0000	0000	0000	Y	
8. Contagious bovine pleuropneumonia	0000	0000	0000	N	
9. Enzootic bovine leukosis	...	...	...	N	
10. Haemorrhagic 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 petits 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	7 (7)	6 (7)	1 (1)	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
- 0000 Disease never reported

Other codes

- ? Presence of the disease suspected but not confirmed
- ... No information available

** Existence of effective surveillance system

- Yes System exists.
- No System does not exist.

Approved by

Dr Kitman Dyrting

Name:

Senior Veterinary Officer (Veterinary Laboratory)

Position:

Signature:

29 June 2007

Date:



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	<p>The reported case in January occurred in a pig farm with 2 sows affected and no mortality.</p> <p>FMD type O is known to occur in pigs in Hong Kong and pigs are routinely vaccinated against type O FMD.</p>
2	<p>EHV1 viruses were detected in nasopharyngeal samples of mildly pyrexia (101-103 F) racehorses at the Sha Tin Racecourse of the Hong Kong Jockey Club during February through the reporting period with a cumulative total of ~10% of racehorses affected. Infection control measures included separation of affected horses and disinfection of stables. Preliminary phylogenetic analysis conducted at the Animal Health Trust suggested a non-paralytic strain of the virus. All horses recovered uneventfully with no complications or neurological signs. No new cases were reported since 4 May 07.</p> <p>Since 1997, horses have been vaccinated against EHV 1 and 4.</p>
3	<p>Vaccination is practised in all equidae against Japanese Encephalitis.</p>
4	<p>Most pigs are vaccinated against classical swine fever.</p>
5	<p>14 cases (involving 15 birds) of highly pathogenic H5N1 virus infection were detected during the reporting period. The species involved are Scaly-breasted Munia (<i>Lonchura punctulata</i>, 3 cases) White-rumped Munia (<i>Lonchura striata</i>, 1 case), Chestnut Munia (<i>Lonchura malacca</i>, 1 case), Japanese White-eye (<i>Zosterops japonica simplex</i>, 1 case), Silver-eared Mesia (<i>Leiothrix argentauris</i>, 1 case with 2 birds), House Crow (<i>Corvus splendens</i>, 2 cases), Blue Magpie (<i>Urocissa erythrorhyncha</i>, 1 case), Crested Goshawk (<i>Accipiter trivirgatus</i>, 1 case), Peregrine Falcon (<i>Falco peregrinus</i>, 1 case), Common Kestrel (<i>Falco tinnunculus</i>, 1 case) and Long-tailed Shrike (<i>Lanius schach</i>, 1 case). Source(s) of infection were not determined and no spread was detected. For details of these cases, please refer to the attached appendix 1.</p> <p>Extensive avian influenza surveillance is being conducted throughout Hong Kong all year round. During this reporting period over 12000 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, pet birds 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.</p>
6	<p>Extensive surveillance is being conducted as part of the avian influenza surveillance program. Poultry are routinely vaccinated against Infectious bursal disease.</p>
7	<p>Poultry are routinely vaccinated against Newcastle disease.</p>
8	<p>Three cases of disease caused by Nervous Necrosis Virus were seen during the reporting period involving 2 properties. The 2 cases in January and February occurred in imported giant grouper fingerlings submitted by the same owner with cumulative mortality reached 30 %, while the case in March occurred in 4-5 months old Green Grouper with 1 % mortality.</p>

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 (in chronological order):

	Date of initial detection	Species	Location found (WGS84)	No. of outbreak	Susceptible/ Cases/ Deaths	Destroyed	Slaughtered
1	3 Jan 2007	Scaly-breasted Munia (<i>Lonchura punctulata</i>)	Wan Chai (22° 16' 33" N – 114° 10' 59" E)	1	1/ 1/ 1	0	0
2	12 Jan 2007	Crested Goshawk (<i>Accipiter trivirgatus</i>)	Sham Shui Po (22° 19' 49" N – 114° 10' 05" E)	1	1/ 1/ 1	0	0
3	17 Jan 2007	House Crow (<i>Corvus splendens</i>)	Sham Shui Po (22° 19' 51" N – 114° 09' 31" E)	1	1/ 1/ 1	0	0
4	17 Jan 2007	Japanese White-eye (<i>Zosterops japonica simplex</i>)	San Po Kong (22° 20' 01" N – 114° 12' 07" E)	1	1/ 1/ 1	0	0
5	18 Jan 2007	White-rumped Munia (<i>Lonchura striata</i>)	Mong Kok (22° 19' 38" N – 114° 10' 31" E)	1	1/ 1/ 1	0	0
6	24 Jan 2007	Peregrine Falcon (<i>Falco peregrinus</i>)	Tsuen Wan (22° 22' 22" N – 114° 06' 32" E)	1	1/ 1/ 1	0	0
7	25 Jan 2007	House Crow (<i>Corvus splendens</i>)	Sham Shui Po (22° 19' 58" N – 114° 09' 31" E)	1	1/ 1/ 1	0	0
8	7 Feb 2007	Blue Magpie (<i>Urocissa erythrorhyncha</i>)	Sham Shui Po (22° 20' 08" N – 114° 09' 46" E)	1	1/ 1/ 1	0	0
9	9 Feb 2007	Silver-eared Mesia (<i>Leiothrix argentauris</i>)	Mong Kok (22° 19' 38" N – 114° 10' 31" E)	1	2/ 2/ 2	0	0
10	17 Feb 2007	Common Kestrel (<i>Falco tinnunculus</i>)	Sham Shui Po (22° 20' 10" N – 114° 10' 04" E)	1	1/ 1/ 1	0	0
11	21 Feb 2007	Chestnut Munia (<i>Lonchura malacca</i>)	Mong Kok (22° 19' 36" N – 114° 10' 05" E)	1	1/ 1/ 1	0	0
12	21 Feb 2007	Scaly-breasted Munia (<i>Lonchura punctulata</i>)	Happy Valley (22° 16' 12" N – 114° 11' 04" E)	1	1/ 1/ 1	0	0
13	27 Feb 2007	Scaly-breasted Munia (<i>Lonchura punctulata</i>)	Sham Shui Po (22° 19' 42" N – 114° 09' 15" E)	1	1/ 1/ 1	0	0
14	6 Mar 2007	Long-tailed Shrike (<i>Lanius schach</i>)	Hung Hom (22° 18' 08" N – 114° 11' 06" 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
Scaly-breasted Munia (<i>Lonchura punctulata</i>)	Oriental zoogeographical region	Fairly common resident	Forages in woodlands and gardens; seed-eating bird.	Occurs in flocks in almost any habitats, including woodlands and urban gardens.
White-rumped Munia (<i>Lonchura striata</i>)	Oriental zoogeographical region	Common abundant resident	Forages in woodlands and gardens; seed-eating bird.	Occurs in flocks in almost any habitats, including woodlands and urban gardens.
Chestnut Munia (<i>Lonchura malacca</i>)	Southeast Nepal, northeast India to southwest China	Irregular feral breeding species	Seed-eating bird.	Occurs in wetland areas.
Japanese White-eye (<i>Zosterops japonica simplex</i>)	East Asia	Common abundant resident	Forages in shrubs and trees; omnivorous with insects and fruits as its main diet.	Occurs in flocks in wooded areas in urban parks, woodlands, shrublands and wetlands.
Silver-eared Mesia (<i>Leiothrix argentauris</i> .)	Himalayas to southern China and Sumatra	Feral population of captive origin	Feeds on small insects and fruits	Mainly found in woodlands.
House Crow (<i>Corvus splendens</i>)	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.
Blue Magpie (<i>Urocissa erythrorhyncha</i>)	Himalayas to eastern China	Quite common and widespread resident	Omnivorous feeds on fruit and small birds	Occurs in woodland edge and urban areas
Crested Goshawk (<i>Accipiter trivirgatus</i>)	South China	Uncommon widespread resident	Prey items include rodents, bats and birds.	Mature woodland but also seen over shrubland, urban parks and occasional in Deep Bay area
Peregrine Falcon (<i>Falco peregrinus</i>)	Southern and South-eastern Asia	Scarce resident and winter visitor	Prey chiefly on birds, occasional small mammals, including bats and rats.	Seen singly or in pairs in almost any open habitat.
Common Kestrel (<i>Falco tinnunculus</i>)	Tibet east through north Indochina to Korea and Japan, south to India, Malay Peninsula and Philippines	Common autumn migrant and less common winter visitor	Prey chiefly on rodents, birds and insects.	Moderately wooded terrains and cultivation wetlands
Long-tailed Shrike (<i>Lanius schach</i>)	South China	Common and widespread resident	Carnivorous accepting a wide variety of food including large insects, small mammals, birds, lizards, fish, etc.	Open countryside and urban area

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.