Item 4 Details and timing of any report(s) or relevant record(s) available from Kwong Wah Hospital to HA subsequent to the admission of Professor LIU (hereinafter referred to as patient number 37) to the hospital, and the contents of HA's notices issued to other hospitals, if any, together with the timetable of issuance.

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i) Reports from Kwong Wah Hospital to HA subsequent to the admission of Patient number 37 to the hospital

Date	Report	Attachment
22.2.2003	Report Form for severe community acquired pneumonia to Secretariat of Task Force on Infection Control (TFIC), Hospital Authority Head Office (HAHO) – Patient number 37.	A
22.2.2003	Clinical Record Form for severe community acquired pneumonia to Secretariat of Task Force on Infection Control (TFIC), HAHO.	B
3.3.2003	Reports of two patients (number 37 & number 37B) admitted to KWH who were not classified at that time as severe community acquired pneumonia but were family contacts with Patient number 37 were reported to the on call micro biologist for information.	C
3.3.2003	Report Form for severe community acquired pneumonia to Secretariat of Task Force on Infection Control (TFIC), HAHO – Patient number 37B	D

ii) Contents of HA's notices issued to other hospitals and Department of Health (DH).

24.2.2003	HAHO informed DH of Patient number 37 case at KWH	E
28.2.2003	Following analysis and evaluation of reported Severe Community Acquired Pneumonia (SCAP) cases, revised FAQ issued to hospitals that reinforced droplet precautions and laboratory arrangements.	F
3.3.2003	DH advised of two unwell family contacts of Patient number 37	G
3.3.2003	DH advised of SCAP case - Patient number 37B – family contact of Patient number 37	H
7.3.2003	Revised FAQ with new Q8 & 9 issued to hospitals highlighting infectivity.	I

Appendix I

Report Form for severe community acquired pneumonia

From : Kwong Wah Hospital

Date : 22.2.2003

To: Secretariat of TFIC, HAHO
(Fax No: 2881-5848)
(HA intranet mail: "Secretariat of Infection Control Task Force")

Name	Sex/ Age	HK_ID	Hospital No./ A[redacted] No.	Ward/Bed	Onset Date	Admission Date	CXR	Diagnosis/ Organism	General Condition Good/ Satisfy/ Fair/Poor
[redacted] Patient number 37	M/64	[redacted]	[redacted]	E5/2	16.2.2003	22.2.2003		?	Fair

040002

Attachment A(p.1)

040003

Faxed to HKU on 6/1

Attachment B(p.1)

Confidential

The hospital ICTs/ ICOs are requested to fax the completed form asap

To: Secretariat TFIC (Fax: 2881 5848)
Dr. Dominic Tsang, QEH (Fax: 2958 6790)

Please also update the progress of the cases on a regular basis. If needed, the hospital ICT/ICO will be contacted for further updated information.

Enquiry on the CRF should be directed to Dr Dominic Tsang, at 2958 6849.

Clinical Record Form
For Severe Atypical Community Acquired Pneumonia

This form is for capturing the clinical features, investigation results and treatment outcome of all patients suffering from severe atypical community acquired pneumonia admitted to HA hospitals.

The case definition for this study is community-acquired pneumonia (CAP) **who require assisted ventilation or ICU/HDU care.**

Patient particulars: (or Use Patient admission label)

KWH DOB: 09/02/1939
[redacted] M 64y
[redacted] Patient number 37A
[redacted] B5 3 ICU
22/02/2003 11:47 NE2

Name _____ HK_ID _____

Hospital Number _____ Sex/Age _____ Date

- Old age home or other institution residence ☑ No
- Hospitalization 2 weeks before admission ☐ Reasons/diagnosis, pls specify working in mainland China Sun Hospital.
- Antibiotics treatment before admission ☐ No ☑ Yes (please specify) _____
- Contact with animals, or birds ☑ No ☐ Yes (please specify) _____
- Travel in past 2 weeks ☐ No ☐ Yes (please specify) travelled from mainland China.
- Past health: (please specify) _____

Clinical Features on Presentation

Duration of symptoms 7 days prior to admission

☑ Fever ≥ chills	☑ Cough dry	☐ Sputum
☑ Dyspnea	☐ Haemoptysis	☑ Pleuritic chest pain Lt.
☐ Diarrhoea	☑ Headache	☑ Myalgia

Other symptoms, please specify: _____

_____

Clinical Record Form
For Severe Atypical Community Acquired Pneumonia

Physical Examination Findings on admission

BP 116/85 mmHg Pulse 117 /min SaO2 85 % (Room air/~~O_2 please specify~~ %)

Respiratory Rate 26. / min Temperature 38.5 °C

☐ Cyanosis ☐ Confusion/ delirium
☐ Wheezing ☑ Crepitations

Others, please specify: _____

Investigation result upon Admission

CXR ☐ Consolidation (Lobar or patchy) ☑ Interstitial shadow ☐ Effusion
☐ Unilateral ☑ Bilateral
☐ Progression after admission

WBC count 11.4 10^9/L Lymphocyte count _____ 10^9/L

Serum creatinine ☑ <120 µmol/L ☐ >120 µmol/L

ABG: pH 7.49 PCO_2 3.5 kPa PO_2 6.7 kPa
SaO_2 90 % on ~~nasal/NRM~~ O_2 _____ ~~LPM~~ 50% O_2 mask.

Liver function: ☐ normal ☐ impaired, please specify: 56U 8x 56U 6x.

ASOT: 84

Others findings, please specify: _____

Antibiotics prescribed :

	Name	Dose/Route/Frequency	From (DDMMYY)	To (DDMMYY)
1.	Augmentin	1.2gm IV q8h	280203	
2.	Azithromycin	500mg IV q24h	280203	
3.				
4.				
5.				

Clinical Record Form
For Severe Atypical Community Acquired Pneumonia

Progress:

☐ Mechanical ventilation From: (DDMMYY) _____ to (DDMMYY) _____

☑ ICU admission From: (DDMMYY) 22/02/03 to (DDMMYY) _____
put on BiPAP

Complications:

☐ Septic shock

☐ Multi-organ failure
- ☐ Delirium / septic encephalopathy
- ☐ Acute renal failure
- ☐ Others _____

☐ complications of ventilatory support
- ☐ Barotrauma
- ☐ ventilaor associated pneumonia
- ☐ Others _____

☐ Empyema thoracis or abscess

☐ Others _____

Outcome:

☐ Discharged ☑ Still hospitalised ☐ Died

Please also attach laboratory results that are significant for the analysis. Thank you for the assistance.

Date: 22/02/03 Reported by: ICN 梁桂華

The TFIC Secretariat will inform DH on details of the case for their necessary actions.

NPA x viral IF → All Negative reported by Microbiology on 22/2/03

Report Form for severe community acquired pneumonia

Appendix I

From : Kwong Wah Hospital

Date : 22.2.2003

To: Secretariat of TFIC, HAHO
(Fax No: 2881-5848)
(HA intranet mail: "Secretariat of Infection Control Task Force")

Name	Sex/ Age	HK_ID	Hospital No./ A&E No.	Ward/Bed	Onset Date	Admission Date	CXR	Diagnosis/ Organism	General Condition Good/ Satisfy/ Fair/Poor
[redacted] Patient number 37	M/64	[redacted]	[redacted]	E5/2	16.2.2003	22.2.2003		?	Fair

040006

Attachment B(p.4)

Attachment C(p.1)

040007

Appendix I

Report Form for severe community-acquired pneumonia

From: KWH Hospital MHO

Date: 3/3/03

To: Secretariat, HKC, HAHO, Dr. Dennis Tsang
(Tax No: [redacted] & [redacted])
(HA intranet-mail: "Secretariat of Infection Control Task Force")

[redacted] Patient number 37A	Name [Patient label preferred]
[redacted]	HK-ID
7/56 yrs	Sex/Age
82/4-3	Ward/Bed
1-3-2003	Date of Admission
27-2-2003	Onset Date
Contact with patient [redacted] number 37	Travel (place and duration)
[redacted] (HER BROTHER FROM CHINA WHO IS NOW IN KWH I.C.U WITH PNEUMONIA.	Contact with poultry or birds
	Respiratory symptoms among family members
BILATERAL LOWER ZONE HAZINESS.	CXR on admission
WBC ON ADMISSION = 3.9	Lymphocyte count & total WBC
	remarks
	Name of Case M.O. and phone number
STABLE	General Condition

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Appendix I

Report form for severe community-acquired pneumonia

FOR INFORMATION

To: Secretariat of HIC, HAHO (Fax No: 2881-5848) (HA intranet mail: "Secretariat of Infection Control Task Force")

Hospital: KWH

Date: 3.3.2003

Name [Patient label preferred]	[redacted] Patient number 37B M/53yrs.
HK-ID	[redacted]
Sex/Age	
Ward/Bed	83, 6-1
Date of Admission	28.2.2003
Onset Date	22.2.2003
Travel (place and duration)	HUSBAND OF Patient number 37A [redacted] CONTACT WITH
Contact with poultry or birds	[redacted] Patient number 37 (PNEUMONIA PT IN ICU FROM CHINA).
Respiratory symotoms among family members	
CXR on admission	LLZ HAZINESS
Lymphocyte count & total WBC	WBC = 11.4
remarks	
Name of Case M.O. and phone number	
General Condition	ON BIPAP

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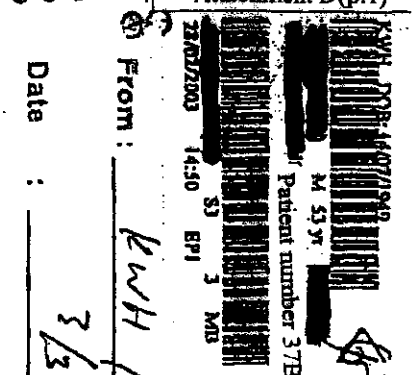
040009

Attachment D(p.1)



Report Form for severe community acquired pneumonia

From : KWH / SS Hospital / HA

Date : 7/3/03

To: Secretariat of TFIC, HAHO
(Fax No: 2881-5848)
(HA intranet mail: "Secretariat of Infection Control Task Force")

Appendix I

	Name [Patient label preferred]
	HK-ID
	Sex/Age
	Ward/Bed
28/2/2003	Date of Admission
24/2/2003	Onset Date
Nil	Travel (place and duration)
/	Contact with poultry or birds
Yes, pt's wife	Respiratory symptoms among family members
LLL consolidation	CXR on admission
WBC 7.1 = Lymph 0.7. 7/3/03 in clinic	Lymphocyte count & total WBC
A/Nth family member (which is pt's wife's brother) has severe CAP and is now in ICU in Kwong Wah Hospital. He was the source pt of his wife.	remarks
Chan Yat Ting 23122311	Name of Case M.O. and phone number
Fair, require BiPAP support.	General Condition

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Attachment E(p.1)

040010

Anna WONG, HOPSHR CIII

From: Secretariat of Infection Control Task Force
Sent: Monday, February 24, 2003 10:12 AM
To: Dr L Y Tse, DH; LAU David; LIU Shao Haei; TAY Margaret; TSANG N C
Cc: Clement CHE, HOPS&HR AM(PS)4
Subject: Reported from HA Hospitals for suspected case of Community-acquired Pneumonia as at 24.2.02 am

Dear all,

FYI

Atttached scan file was reported from HA Hospitals as at 24 Feb 02 as at 10 am.

Report Form as at 030224.pdf

Rgds

Appendix I

Report Form for severe community acquired pneumonia

From : Kwong Wah Hospital

Date : 22.2.2003

To: Secretariat of TFIC, HAHO
(Fax No: 2881-5848)
(HA intranet mail: "Secretariat of Infection Control Task Force")

Name	Sex/ Age	HK_ID	Hospital No./ A~~&~~No.	Ward/Bed	Onset Date	Admission Date	CXR	Diagnosis/ Organism	General Condition Good/ Satisfy/ Fair/Poor
[redacted] Patient number 37	M/64	[redacted]	[redacted]	E5/2	16.2.2003	22.2.2003		?	Fair

040011

Attachment 6(p.2)

Surveillance summary

M:F	23:16
Age>50 years	28
Recent travel to China	14
• died	5 (35.7%)
Lymphocyte count <1.0	29
Outcome	
• Died	12 (30.7)
• Discharged	5

Agents identified

Psittacosis	2
Bacterial	2
H5N1	1
Adenovirus	2
Parainfluenza	2
Rickettsia	1
Influenza A	2
Influenza B	3
unknown	24 (61.5%)

Lookback study

On pneumonia diagnosis code, they are

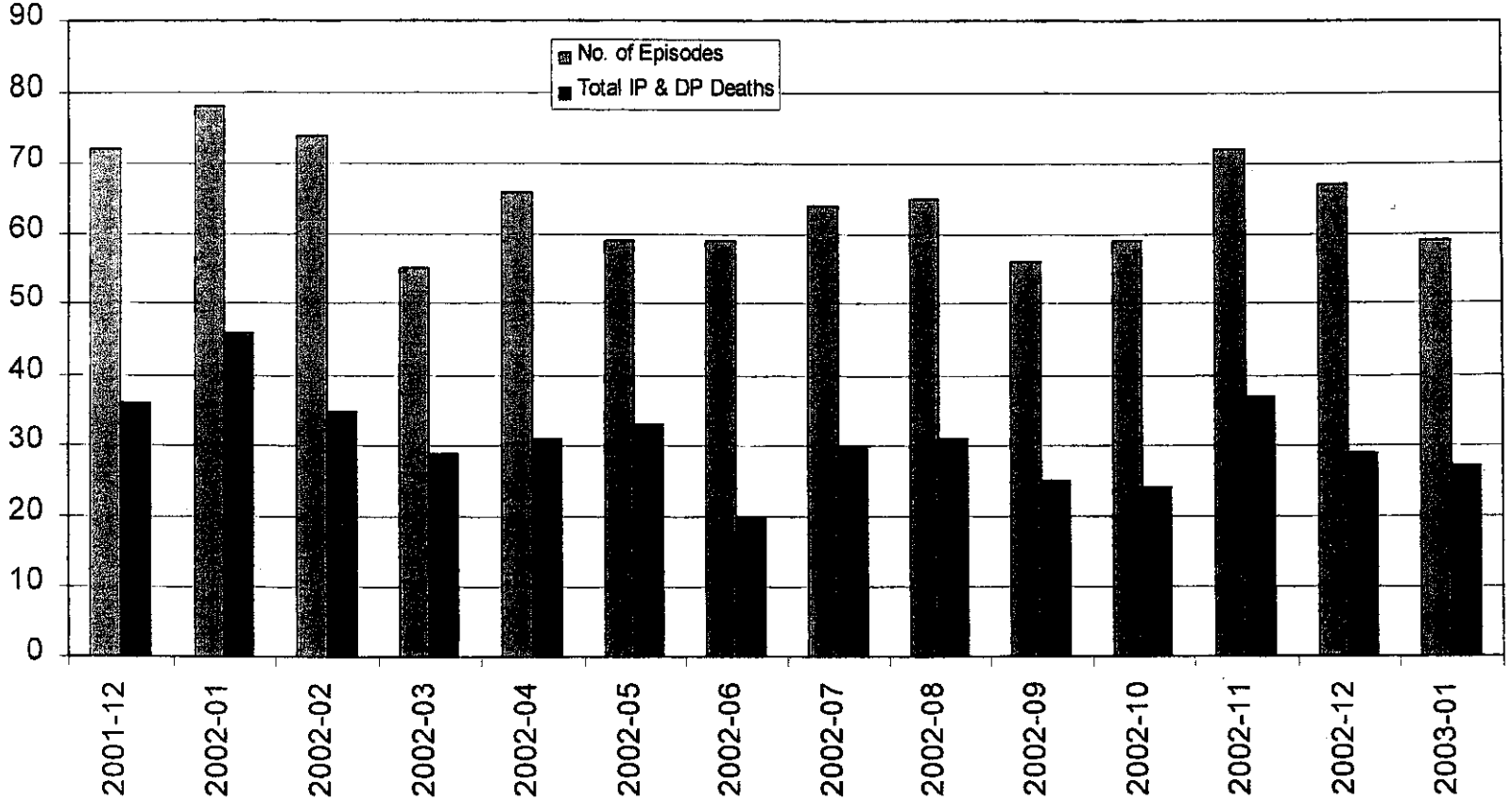
Code	Ext	Description
480.0	0	Adenoviral
480.1	0	RSV
480.2	0	Parainf
480.9	0	Viral
483.0	0	Mycoplasmal
483.1	0	Chlamydial
483.8	0	Other organisms
484.1	0	CMV
486	0	Pneumonia
486	1	Atypical pneumonia
487.0	0	Influenza

	Y		N		[redacted]	[redacted]
	No. of Episodes	Total IP & DP Deaths	No. of Episodes	Total IP & DP Deaths	[redacted]	[redacted]
2001-12	72	36	1208	215	[redacted]	[redacted]
2002-01	78	46	1349	238	[redacted]	[redacted]
2002-02	74	35	1368	215	[redacted]	[redacted]
2002-03	55	29	1223	168	[redacted]	[redacted]
2002-04	66	31	1141	165	[redacted]	[redacted]
2002-05	59	33	1142	183	[redacted]	[redacted]
2002-06	59	20	1045	165	[redacted]	[redacted]
2002-07	64	30	1060	148	[redacted]	[redacted]
2002-08	65	31	870	144	[redacted]	[redacted]
2002-09	56	25	840	148	[redacted]	[redacted]
2002-10	59	24	912	145	[redacted]	[redacted]
2002-11	72	37	903	152	[redacted]	[redacted]
2002-12	67	29	853	123	[redacted]	[redacted]
2003-01	59	27	1048	148	[redacted]	[redacted]

Remarks : IP : In-patient
DP : Day-patient

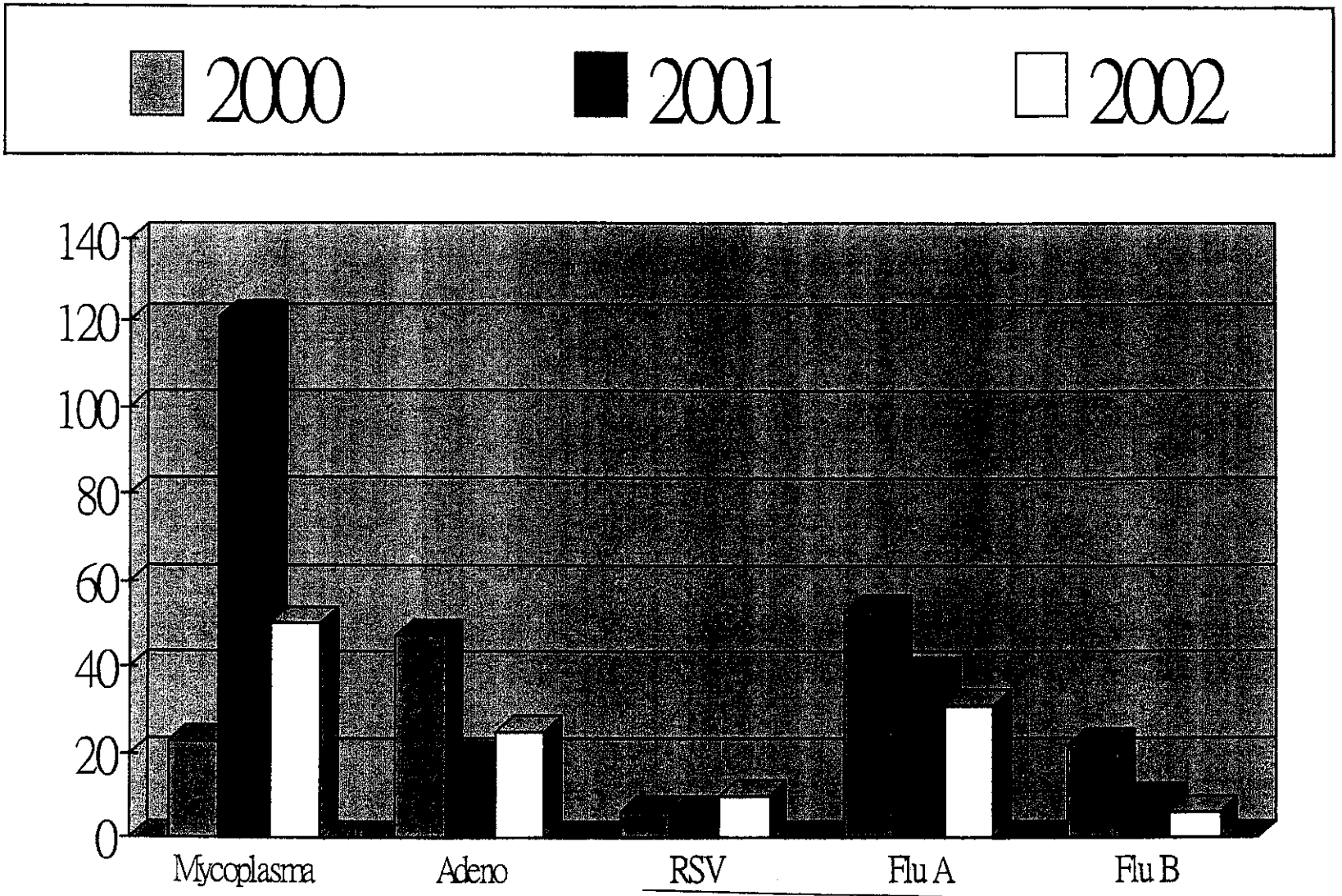
Analysis and Evaluation of Reported SCAP cases (P.4)

ICU cases of Atypical CAP



Analysis and Evaluation of Reported SCAP cases (P.5)

Breakdown of positive respiratory pathogens in QEH



Analysis and Evaluation of Reported SCAP cases (P.6)

28/2/03

FAQ in the Management of Severe Community Acquired Pneumonia

Revised on February 28, 2003

1. **What is the case definition of severe Community Acquired Pneumonia (CAP)?**

   - According to the ad hoc Working Group on the subject, severe CAP refers to cases of CAP requiring assisted ventilation (limited to intubated cases only) or CAP cases under ICU/HDU care.

2. **What is the background incidence of atypical Community Acquired Pneumonia (CAP) admitted to ICU?**

   - In last winter, from December 2001 to February 2002, there were on an average 74 CAP cases admitted to ICU, mainly atypical pneumonia.

3. **What to do when I have a patient suffering from severe Community Acquired Pneumonia (CAP)? (NEW)**

   - Such cases should be reported to the Secretariat of TFIC, HAHO Fax No: 2881-5848 (HA intranet mail: "Secretariat of Infection Control Task Force") using the revised report form ***(Appendix I)***.

   - The Secretariat of TFIC would update the hospital's ICTs and Duty Microbiologist of such cases.

   - The hospital ICTs are no longer required to complete the CRF.

   - Dr. Dominic Tsang, subject officer, would seek the assistance of the hospital's ICT or case Medical Officer in updating of case information when required.

   - Send additional tests as outlined below.

4. **What is the arrangement for laboratory testing? (NEW)**

   - Specimens should be collected (NPA, serum samples) and sent to GVU, DH by existing arrangement. GVU would test for all potential agents of atypical pneumonia.

   - Additional specimens (NPA, clotted blood and EDTA blood samples) should be collected and sent to QMH Microbiology laboratory (attn: Dr. Malik Peiris) through the hospital's Pathology department. Special test and detailed analysis on H5 avian influenza would be performed.

   - Similarly, specimens of NPA and clotted blood from patients in NTE cluster hospitals, YCH and CMC should be sent to Virology laboratory, Prince of Wales Hospital for special testing. The request for 'atypical pneumonia surveillance' should be clearly stated on the request form.

   - Such arrangement of special tests would be reviewed in two weeks to assess the need for continuation.

- Hospital ICT would follow up on the cases reported and make sure the tests are sent promptly.

5. Can I send for special testing on other CAP cases?

- Others cases of CAP, not fulfilling the case definition of severe CAP, should be investigated according to normal routine practice i.e. specimens should be sent to GVU-DH, Virology Laboratory in Prince of Wales Hospital, Microbiology Laboratory in Queen Mary Hospital as appropriate, for testing on agents of atypical pneumonia.

- Also, for cases of CAP not fulfilling the case definition of severe CAP, if the patient is having lymphopenia, returning from China or recent poultry contact, such specimens should also be sent to the appropriate laboratory for special testing.

6. What follow up actions would be done?

- HAHO would inform the reported cases to Department of Health for epidemiological analysis.

- The Working Group would compile a database on all such cases, and analysis would be conducted on possible epidemiological linkage.

- Test results would be monitored and hospital will be notified once available.

7. What are the Infection Control Measures?

The recommended method of isolation for influenza is droplet precautions in additional to Universal Precautions. This is because the disease is not airborne, but by large particle droplet (larger than 5 μm) which will not be transmitted beyond 3 feet from the source.

Droplet Precautions includes:

- Place patient in a room with other patient(s) having influenza (**cohorting**). Special air handling and ventilation are not necessary. When cohorting is not possible, maintain separation of at least 3 feet from other patients.

- Staff should have barrier apparels (gloves and gowns) when coming into contact with the patient's blood, body fluids, secretions, excretions, mucous membranes and contaminated items.

- Wear a mask when working within 3 feet of the patient.

- Wash hands after removal of gloves and before nursing another patient even when contact is only with non-contaminated items.

- Proper disinfection of the environment and equipment contaminated with blood, body fluids, secretions and excretions is required.

8. What is the Use of Antivirals?

Amantadine can reduce the severity and duration of signs and symptoms of only influenza A illness when given in the early stage of infection. Amantadine is associated with neurological and gastrointestinal side effects. Cautions must be exercised for people with renal insufficiency. Resistance emerges within 2-5 days in around 30% of cases and such resistant viruses are readily transmissible.

The two new anti-influenza drugs, Zanamivir (Relenza) and Oseltamivir (Tamiflu), are neuraminidase inhibitors and are active against both influenza A and B.

- Zanamivir is approved for use in patient aged 7 years or older. Oseltamivir is approved for treatment of patient aged 1 year or older.
- Oseltamivir is also approved for influenza chemoprophylaxis among person aged 13 year or older.
- When treatment is commenced within 36 to 48 hours of the onset of influenza, both drugs can reduce clinical symptoms of influenza by approximately 1 day.
- Zanamivir may rarely cause bronchospasm in patients with asthma and bronchodilators must be readily available when it is used on such patients. In patients on inhaled bronchodilators, use it before the dose of zanamivir. Oseltamivir has gastrointestinal side effects including nausea (10% in adults, 14.3% in children) and vomiting (9% in adults) which might be less severe when the drug is taken with food.
- Development of viral resistance to zanamivir and oseltamivir during treatment has been reported.
- The use of these new agents as chemoprophylxis among contacts should base on clinical symptoms, the degree of contact with index cases, and subject to evaluation by the attending physician.

9. Where can I get further information and advice?

- Secretariat, TFIC
- Hospital Infection Control Team
- Seminars on the subject are being organised and would be announced soon.
- Guideline on "Use of Amantadine in the Management of H5N1 Infections" issued by Department of Health, 20 February 2003 ***(Appendix II)***.

28 February 2003

Hospital Authority

28/2/03

Appendix I

Report Form for severe community acquired pneumonia

From : _____ Hospital

To: Secretariat of TFIC, HAHO
(Fax No: 2881-5848)
(HA intranet mail: "Secretariat of Infection Control Task Force")

Date : _____

Name [Patient label preferred]	HK-ID	Sex/Age	Ward/Bed	Date of Admission	Onset Date	Travel (place and duration)	Contact with poultry or birds	Respiratory symotoms among family members	CXR on admission	Lymphocyte count & total WBC	remarks	Name of Case M.O. and phone number	General Condition

040021

Attachment F(p.10)

28/2/03

Use of Amantadine in the Management of H5N1 Infections

From the drug sensitivity study at Centres for Disease Control and Prevention (CDC) on the isolates from two H5N1 cases in 1997, it has been shown that the H5N1 virus is sensitive to amantadine. This drug is an effective agent for the treatment and prophylaxis of influenza A (but not B). However, it is prudent to note that the influenza viruses can rapidly develop resistance to this drug. Hence, doctors are advised to use the drug appropriately for treatment or prophylaxis of influenza A. The following guidelines which have incorporated the advice from the CDC experts are recommended for doctors' reference.

Confirmed case of H5N1 infection

Amantadine 100mg twice a day for 5 days can be used to treat cases of H5N1 infection. If started within 48 hours of the start of illness, amantadine can reduce the severity and shorten the duration of illness. Doses should be reduced for children and elderly, and those with underlying renal diseases. For children aged 1 to 9, the dosage is 5mg/kg/day in 2 divided doses up to 150 mg. For children aged greater than 9, adult dosage can be used but if the body weight of the child is less than 40kg, use the regime of 5mg/kg/day in 2 divided doses up to 150 mg.

Symptomatic Contacts of H5N1 cases

Close contacts, i.e. home contacts and medical staff providing direct care to patients with H5N1 infection, should be put on medical surveillance. If they develop symptoms compatible with influenza (fever of 38°C or higher, together with cough or sore throat), they should have a throat swab or nasopharyngeal aspirate taken for viral cultures. Treatment with amantadine (100mg twice daily for 5 days) can be started pending viral culture results.

Side effects

Amantadine can cause neurological and gastrointestinal side effects. In one study of healthy adults, approximately 13% of those treated with amantadine developed side effects. Neurological side effects include nervousness, anxiety, difficulty in concentrating and dizziness. More serious neurological side effects like marked behavioural changes, delirium, hallucinations, agitation and seizures have been observed. Gastrointestinal side effects include nausea, vomiting abdominal pain and constipation. These side effects will stop after the drug has been withdrawn. Cautions must be exercised for people with renal insufficiency and in the elderly age group. The drugs are contraindicated for persons with seizure disorders.

Department of Health, HKSAR

20 February 2003

Shao Haei LIU Dr, HOPSHR SEM(PS)1

From: Shao Haei LIU Dr, HOPS&HR SEM(PS)1
Sent: 3日March2003年Monday 13:28
To: 'ly_tse@dh.gov.hk'
Cc: W M KO Dr, HOPS&PA D(PS&PA); N C TSANG, QEH CON(Path); W H SETO Dr, HKWC CD(Q&RM) / HKWC CC(MIC) / QMHMIC COS
Subject; FW: Family contacts of index patients (Liu)

Sensitivity: Confidential

This the KWH case for your infomation.
Family contact [redacted] listed in the table should be numbered as 37A.
Patient number 37A
SH LIU

-----Original Message-----
From: N C TSANG, QEH CON(Path)
Sent: Monday, March 03, 2003 12:14 PM
To: Malik Peiris; Shao Haei LIU; Dr. Wilina Lim
Cc: Clement CHE; W M KO
Subject: FW: Family contacts of index patients (Liu)
Sensitivity: Confidential

Dear all,
Patient number 37B
I have discussed with Dr Wilson Yee, KWH, case i/c of patient [redacted] on the possibility of getting lower respiratory specimen for aetiological diagnosis. After discussing with Dr Chan Yuk Choi, Dr Yee is seriously considering the option of an open lung biopsy to obtain tissue for our investigation. Pending patient's consent, such procedure would proceed and ling tissue would be delivered to your laboratories for processing.

I shall contact Malik and Wilina once the speciemens are available.

Regards

Dominic

-----Original Message-----
From: N C TSANG, QEH CON(Path)
Sent: Monday, March 03, 2003 11:05 AM
To: Shao Haei LIU Dr, HOPS&HR SEM(PS)1; Clement CHE, HOPS&HR AM(PS)4
Cc: 'Malik Peiris'
Subject: Family contacts of index patients (Liu)

I attach information on the two unwell family contacts of case 37, for your information and forwarding to DH for epidemiological analysis.

Contacts37.doc

Table 3: Family Contacts of Case 37 (Liu)

	KWH 37B Patient number 37B	KWH 37A Patient number 37A	Hospital
	[redacted]	[redacted]	Name
	[redacted]	[redacted]	HK_ID
	M 53	F 56	Sex/age
	Husband of case 37A, Contact case 37 on 21 Feb	Sister of case 37. Contact on 21 Feb	Details
	28 Feb	1 March	DOA
	Onset: 22 Feb	**Onset 27 Feb**	CC
	LLZ hazziness	Bilateral LL hazziness	CXR on admission
			BP on admission
			Temp. on admission
			Pulse on admission
			Resp. rate on admission
	S3, 6-1	S2, 4-3	Ward/bed
	Nil	**Nil**	Travel History
	0.7 (WBC =7.3)	WBC=3.9	Lymphocyte
			Anti-viral Treatment
	Open Lung Bx on 4 March		+ve Lab. results
	4 March intubated in ICU	**stable**	Condition

040025

Attachment H(p.1)

nna WONG, HOPSHR CIII

rom:	Secretariat of Infection Control Task Force
ent:	Monday, March 3, 2003 3:40 PM
o:	Dr L Y Tse, DH; LAU David; LIU Shao Haei; TAY Margaret; TSANG N C
c:	Clement CHE, HOPS&HR AM(PS)4
ubject:	Reported from HA Hospitals for suspected case of Community-acquired Pneumonia as at 3.3.03 at 3:40 pm

Dear all,

FYI

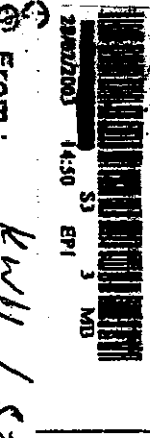
Atttached scan file were reported from HA Hospitals as at 3 Mar 03 at 3:40 pm.

Report Form for CAP 030303.pdf...

Rgds

040026

Attachment H(p.2)



Appendix I

Report Form for severe community acquired pneumonia

From : Kwh / SS Hospital / HAH

Date : 3/3/03

To: Secretariat of TFIC, HAHO
(Fax No: 2881-5848)
(HA intranet mail: "Secretariat of Infection Control Task Force")

	Name [Patient label preferred]
	HK-ID
	Sex/Age
	Ward/Bed
28/2/2003	Date of Admission
24/2/2003	Onset Date
Nil	Travel (place and duration)
—	Contact with poultry or birds
Yes, pt's wife	Respiratory symptoms among family members
LLL haziness	CXR on admission
WBC 7.1 Lymph 0.7.	Lymphocyte count & total WBC
Another family member (sister) of pt's wife's brother has severe CAP and is now on ICU 2. Exact the case of the wife of pt's wife.	remarks
Cathy Ho Ting 23322311	Name of Case M.O. and phone number
fair, require BiPAP support.	General Condition

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FAQ in the Management of Severe Community Acquired Pneumonia

Revised on March 7, 2003

1. **What is the case definition of severe Community Acquired Pneumonia (CAP)?**

   - According to the ad hoc Working Group on the subject, severe CAP refers to cases of CAP requiring assisted ventilation (limited to intubated cases only) or CAP cases under ICU/HDU care.

2. **What is the background incidence of atypical Community Acquired Pneumonia (CAP) admitted to ICU?**

   - In last winter, from December 2001 to February 2002, there were on an average 74 CAP cases admitted to ICU, mainly atypical pneumonia.

3. **What to do when I have a patient suffering from severe Community Acquired Pneumonia (CAP)?**

   - Such cases should be reported to the Secretariat of TFIC, HAHO Fax No: 2881-5848 (HA intranet mail: "Secretariat of Infection Control Task Force") using the revised report form ***(Appendix I)***.
   - The Secretariat of TFIC would update the hospital's ICTs and Duty Microbiologist of such cases.
   - The hospital ICTs are no longer required to complete the CRF.
   - Dr. Dominic Tsang, subject officer, would seek the assistance of the hospital's ICT or case Medical Officer in updating of case information when required.
   - Send additional tests as outlined below.

4. **What is the arrangement for laboratory testing?**

   - Specimens should be collected (NPA, serum samples) and sent to GVU, DH by existing arrangement. GVU would test for all potential agents of atypical pneumonia.
   - Additional specimens (NPA, clotted blood and EDTA blood samples) should be collected and sent to QMH Microbiology laboratory (attn: Dr. Malik Peiris) through the hospital's Pathology department. Special test and detailed analysis on H5 avian influenza would be performed.
   - Similarly, specimens of NPA and clotted blood from patients in NTE cluster hospitals, YCH and CMC should be sent to Virology laboratory, Prince of Wales Hospital for special testing. The request for 'atypical pneumonia surveillance' should be clearly stated on the request form.
   - Such arrangement of special tests would be reviewed in two weeks to assess the need for continuation.
   - Hospital ICT would follow up on the cases reported and make sure the tests are sent promptly.

5. **Can I send for special testing on other CAP cases?**

   - Others cases of CAP, not fulfilling the case definition of severe CAP, should be investigated according to normal routine practice i.e. specimens should be sent to GVU-DH, Virology Laboratory in Prince of Wales Hospital, Microbiology Laboratory in Queen Mary Hospital as appropriate, for testing on agents of atypical pneumonia.

- Also, for cases of CAP not fulfilling the case definition of severe CAP, if the patient is having lymphopenia, returning from China or recent poultry contact, such specimens should also be sent to the appropriate laboratory for special testing.

6. What follow up actions would be done?

- HAHO would inform the reported cases to Department of Health for epidemiological analysis.
- The Working Group would compile a database on all such cases, and analysis would be conducted on possible epidemiological linkage.
- Test results would be monitored and hospital will be notified once available.

7. What are the Infection Control Measures?

The recommended method of isolation for influenza and most other respiratory infections (except pulmonary tuberculosis) is droplet precautions in additional to Universal Precautions. This is because the disease is not airborne, but by large particle droplet (larger than 5 μm) which will not be transmitted beyond 3 feet from the source.

Droplet Precautions includes:

- Place patient in a room with other patient(s) having influenza (**cohorting**). Special air handling and ventilation are not necessary. When cohorting is not possible, maintain separation of at least 3 feet from other patients.
- Staff should have barrier apparels (gloves and gowns) when coming into contact with the patient's blood, body fluids, secretions, excretions, mucous membranes and contaminated items.
- Wear a mask when working within 3 feet of the patient.
- Wash hands after removal of gloves and before nursing another patient even when contact is only with non-contaminated items.
- Proper disinfection of the environment and equipment contaminated with blood, body fluids, secretions and excretions is required.

8. How infectious are these severe cases of CAP to healthcare workers and what have been done by HA? (NEW)

- While some of these severe CAP cases were diagnosed to be Psittacosis (2), Pneumococcal (1), Influenza A H5N1 (1), Influenza A (2), Influenza B (3), Parainfluenza-2 (1), Parainfluenza-3 (1), and Klebsiella pneumoniae (1), the aetiology of most cases of severe CAP remains unknown.
- It is therefore imperative for frontline staff to adopt the recommended infection control precautions in attending to patients with respiratory symptoms such as fever, headache, myalgia, running nose, pleuritic chest pain and cough.
- To assess the potential of person-to-person spread of these severe CAP infections in the healthcare setting, information is being collected on healthcare staff in contact with these severe CAP cases with regard to any subsequent illness. Symptomatic contacts would be managed clinically and investigated accordingly. Staff contacts of any further severe CAP cases would also be monitored closely for respiratory symptoms.
- Such information is expected to be available early next week and would be released once consolidated. However, the early information gathered from hospitals is not alarming.

9. What are the precautions when attending to patients in the AED? (NEW)

- Universal Precautions should always be adopted in attending to any patient in AED. This is aimed to prevent the acquisition of infections transmitted by blood and body fluids.
- When attending to patients with respiratory symptoms (such as fever, sore throat, headache, running nose, cough, myalgia, skin rash, pleuritic chest pain), put on a mask and wash hands after patient contact.

10. What is the Use of Antivirals?

Amantadine can reduce the severity and duration of signs and symptoms of only influenza A illness when given in the early stage of infection. Amantadine is associated with neurological and gastrointestinal side effects. Cautions must be exercised for people with renal insufficiency. Resistance emerges within 2-5 days in around 30% of cases and such resistant viruses are readily transmissible.

The two new anti-influenza drugs, Zanamivir (Relenza) and Oseltamivir (Tamiflu), are neuraminidase inhibitors and are active against both influenza A and B.

- Zanamivir is approved for use in patient aged 7 years or older. Oseltamivir is approved for treatment of patient aged 1 year or older.
- Oseltamivir is also approved for influenza chemoprophylaxis among person aged 13 year or older.
- When treatment is commenced within 36 to 48 hours of the onset of influenza, both drugs can reduce clinical symptoms of influenza by approximately 1 day.
- Zanamivir may rarely cause bronchospasm in patients with asthma and bronchodilators must be readily available when it is used on such patients. In patients on inhaled bronchodilators, use it before the dose of zanamivir. Oseltamivir has gastrointestinal side effects including nausea (10% in adults, 14.3% in children) and vomiting (9% in adults) which might be less severe when the drug is taken with food.
- Development of viral resistance to zanamivir and oseltamivir during treatment has been reported.
- The use of these new agents as chemoprophylxis among contacts should base on clinical symptoms, the degree of contact with index cases, and subject to evaluation by the attending physician.

11. Where can I get further information and advice?

- Secretariat, TFIC
- Hospital Infection Control Team
- Guideline on "Use of Amantadine in the Management of H5N1 Infections" issued by Department of Health, 20 February 2003 ***(Appendix II)***.

7 March 2003
Hospital Authority

7/3/03

Appendix I

Report Form for severe community acquired pneumonia

From : _____**Hospital**

To: **Secretariat of TFIC, HAHO**
(Fax No: 2881-5848)
(HA intranet mail: "Secretariat of Central Committee on Infection Control")

Date : _____

Name [Patient label preferred]	HK-ID		Ward/Bed	Date of Admission	Onset Date	Travel (place and duration)	Contact with poultry or birds	Respiratory symotoms among family members	CXR on admission	Lymphocyte count & total WBC	remarks	Name of Case M.O. and phone number	General Condition

040030

Attachment I(p.4)

7/3/03

Use of Amantadine in the Management of H5N1 Infections

From the drug sensitivity study at Centres for Disease Control and Prevention (CDC) on the isolates from two H5N1 cases in 1997, it has been shown that the H5N1 virus is sensitive to amantadine. This drug is an effective agent for the treatment and prophylaxis of influenza A (but not B). However, it is prudent to note that the influenza viruses can rapidly develop resistance to this drug. Hence, doctors are advised to use the drug appropriately for treatment or prophylaxis of influenza A. The following guidelines which have incorporated the advice from the CDC experts are recommended for doctors' reference.

Confirmed case of H5N1 infection

Amantadine 100mg twice a day for 5 days can be used to treat cases of H5N1 infection. If started within 48 hours of the start of illness, amantadine can reduce the severity and shorten the duration of illness. Doses should be reduced for children and elderly, and those with underlying renal diseases. For children aged 1 to 9, the dosage is 5mg/kg/day in 2 divided doses up to 150 mg. For children aged greater than 9, adult dosage can be used but if the body weight of the child is less than 40kg, use the regime of 5mg/kg/day in 2 divided doses up to 150 mg.

Symptomatic Contacts of H5N1 cases

Close contacts, i.e. home contacts and medical staff providing direct care to patients with H5N1 infection, should be put on medical surveillance. If they develop symptoms compatible with influenza (fever of 38°C or higher, together with cough or sore throat), they should have a throat swab or nasopharyngeal aspirate taken for viral cultures. Treatment with amantadine (100mg twice daily for 5 days) can be started pending viral culture results.

Side effects

Amantadine can cause neurological and gastrointestinal side effects. In one study of healthy adults, approximately 13% of those treated with amantadine developed side effects. Neurological side effects include nervousness, anxiety, difficulty in concentrating and dizziness. More serious neurological side effects like marked behavioural changes, delirium, hallucinations, agitation and seizures have been observed. Gastrointestinal side effects include nausea, vomiting abdominal pain and constipation. These side effects will stop after the drug has been withdrawn. Cautions must be exercised for people with renal insufficiency and in the elderly age group. The drugs are contraindicated for persons with seizure disorders.

Department of Health, HKSAR

20 February 2003