



醫院管理局
HOSPITAL
AUTHORITY

Enhanced Surveillance and Control Measures in Public Hospitals for “Severe Respiratory Disease associated with a Novel Infectious Agent”

Prepared by Chief Infection Control Officer (CICO)
Office

16 January 2020



HA Preparedness Plan for Infectious Disease Pandemic

HA's response to infectious disease pandemic generally follows the HK Government response system. A 3-tier system is differentiated according to the risk of the infectious disease causing serious health impact in HK.



Coordinated by Food and Health Bureau (FHB) and steer Government response

Steering Committee chaired by Secretary for Food and Health (SFH)

Steering Committee chaired by the Chief Executive with FHB

HA will activate the same response levels according to response levels activated by the Government.



Alert
Low Risk



Serious
Moderate Risk



Emergency
High and Imminent Risk

Serious (1) level
Convene Ad hoc CCIDER

Serious (2) level or Emergency level
Convene Ad hoc CCIDER

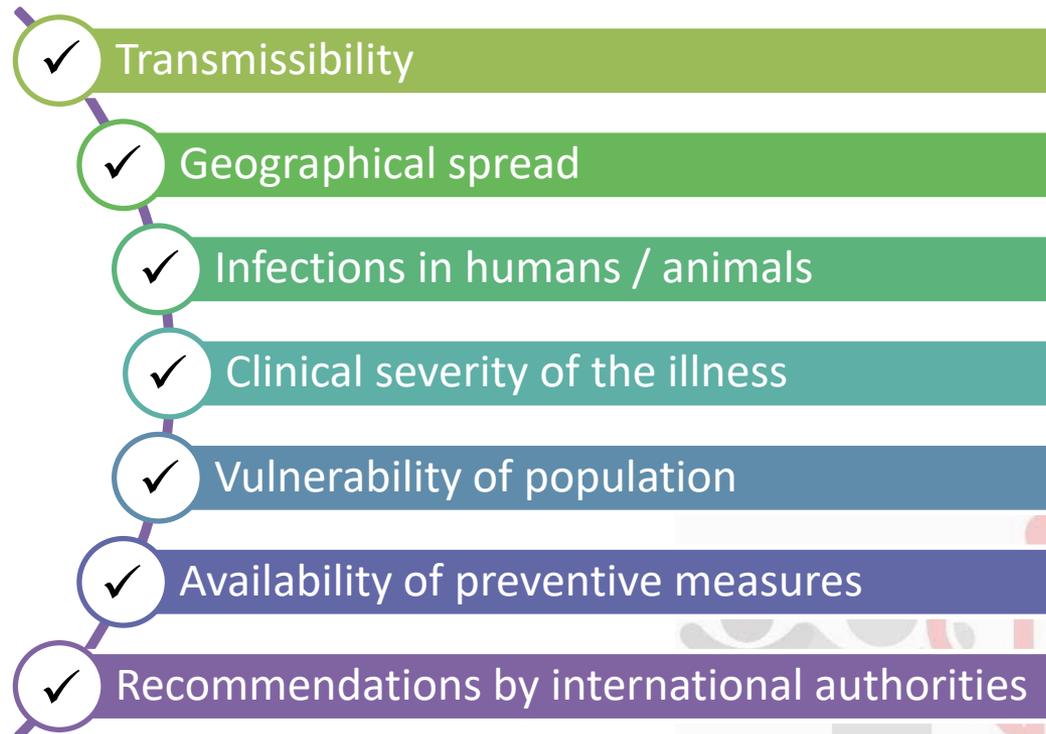
↓
HA Central Command Committee (CCC) chaired by CE of HA

↓
Emergency Executive Committee (EEC) delegated by HA Board.



Risk Assessment

- HK Government and HA's preparedness plans are based on risk assessments rather than scenarios.
- Risk assessment can help to initiate the right response actions at the right time.
- Areas of concern in the risk assessment as follow:



Response Levels

Alert

- Risk of novel infectious disease causing serious health impact in HK is **low**.
- Level intended to prevent importation of disease

Serious

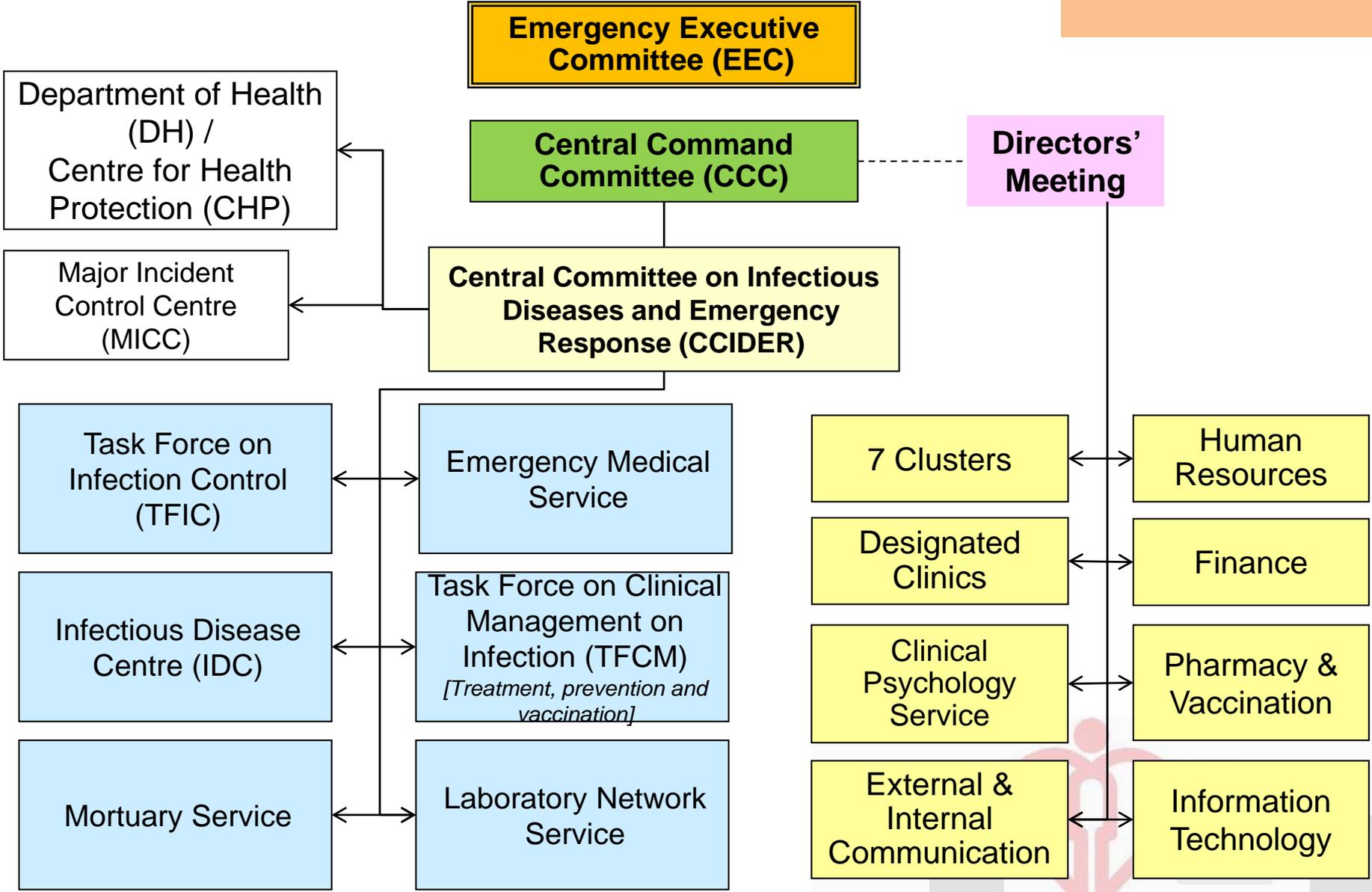
- Risk of novel infectious disease causing serious health impact in HK is **moderate**.
- Will be activated and stood-down by SFH.
- Level intended to limit transmission

Emergency

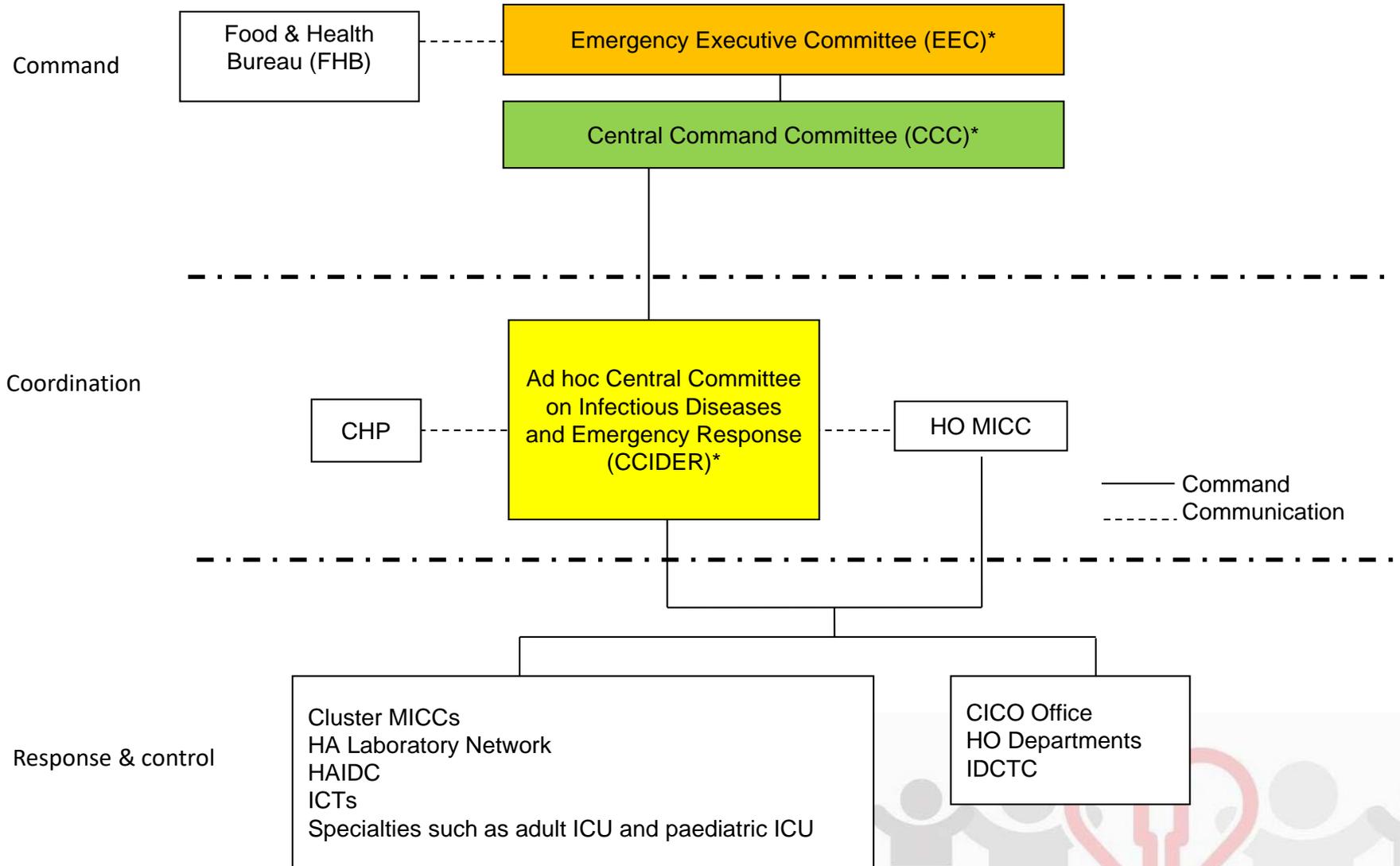
- Risk of novel infectious disease causing serious health impact in HK is **high and imminent**.
- Serious infections may be widespread
- Will be activated and stood-down by CE of HK Government.



Governance



Command Structure



Risk assessment in Hong Kong

- Immediate health impact on local population is moderate.
 - Frequent traffic (flight and high-speed rail) between Wuhan and Hong Kong
 - Imported case from Wuhan is likely
- 4 Jan 2020
 - Government launched the Preparedness and Response Plan for Novel Infectious Disease of Public Health Significance, and activated Serious Response Level.
 - HA activated **Serious Response Level (S2)**.

嚴重
S E R I O U S

因應特區政府應變計劃，醫院管理局現已實施嚴重級別措施，
所有公立醫院訪客及公眾人士必須遵守下列措施：
In accordance with the Hong Kong Government's Preparedness Plan, the Hospital Authority has implemented
measures for the Serious Response Level. Hospital visitors and public please follow instructions below:

進入及離開醫院前
請徹底清潔雙手
Clean your hands
before and after visiting hospital

請預先自行量度體溫
監察健康狀況
Perform temperature check before visiting
a hospital and monitor your health situation

所有病人護理區內
必須佩戴外科手術口罩
Wear a surgical mask in all patient care areas

每次探病只限2人
Only 2 persons are allowed
for every visit

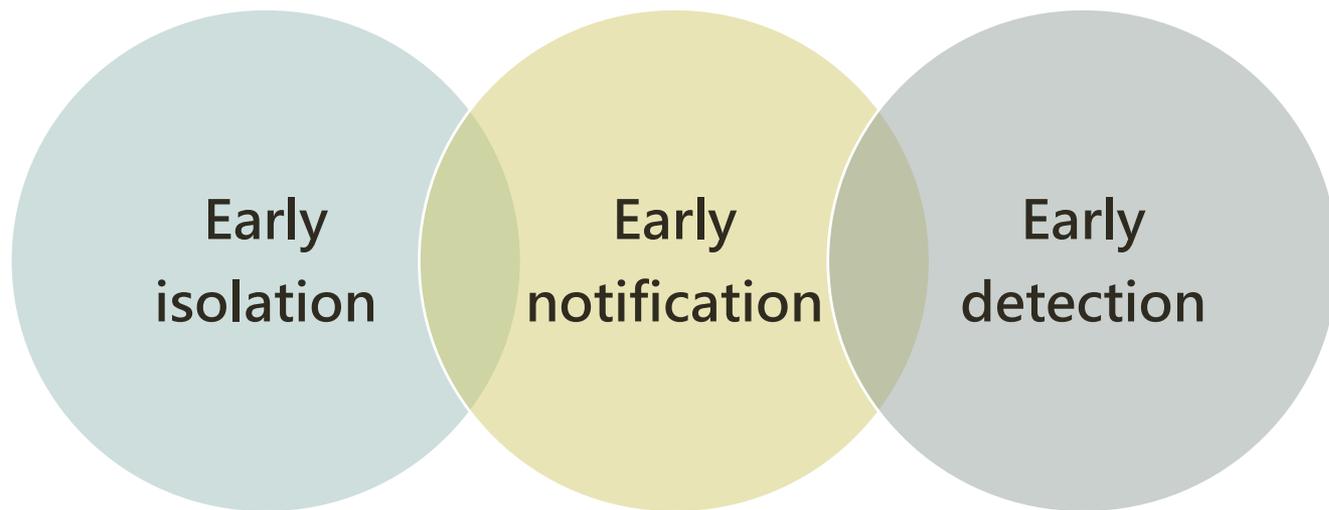
每日不多於 小時
No more than hours daily

每日 至
Daily to

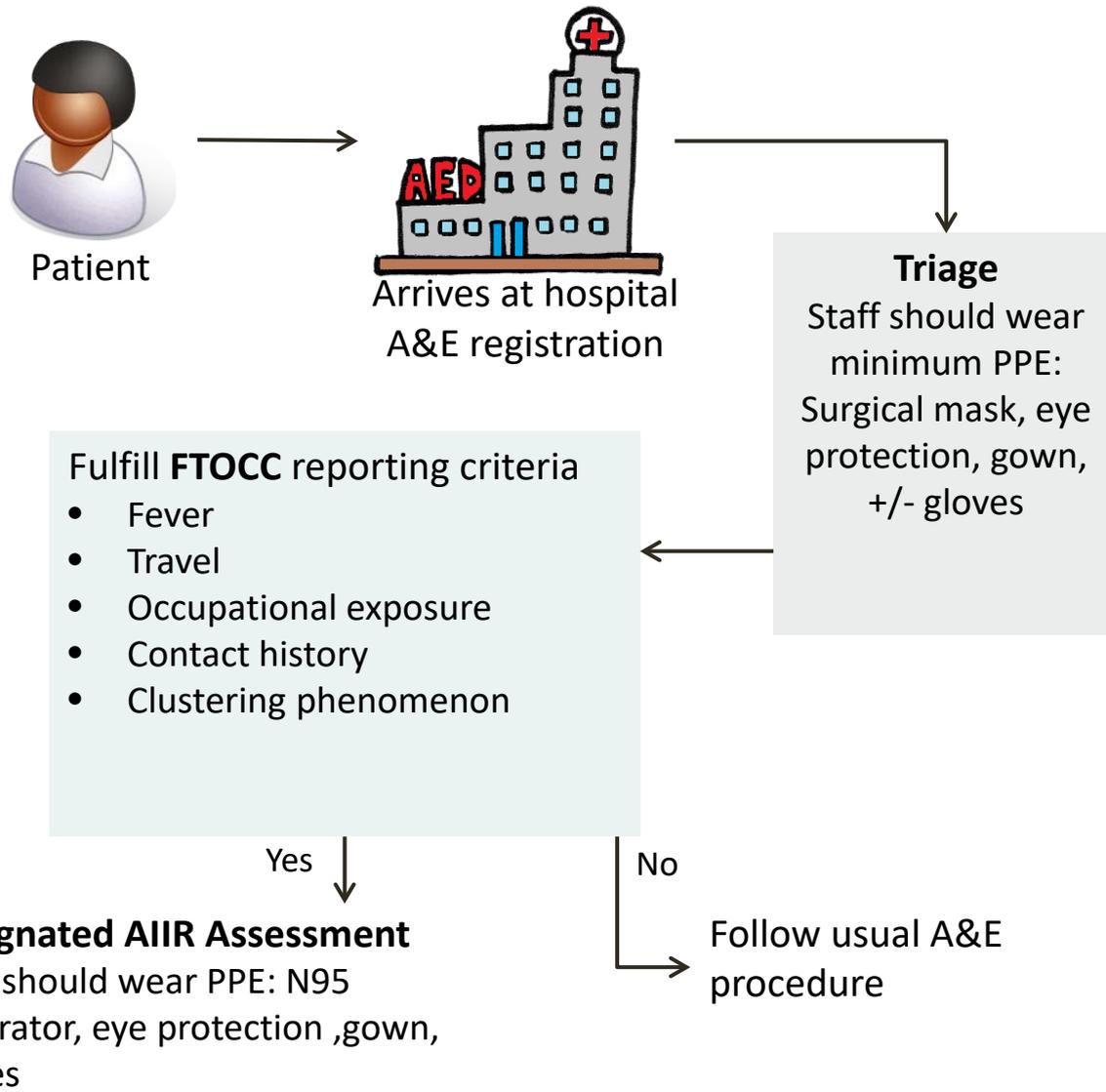
Management of Suspected / Confirmed Cases

Bundle Approach

1. **Early isolation**: airborne infection isolation (All) for suspect cases. Confirmed case should be centrally isolated and managed at HA Infectious Disease Centre (IDC)
2. **Early notification**: electronic platform(s) for surveillance and timely reporting i.e. NDORS / eNID
3. **Early detection**: Laboratory testing at HA laboratories and PHLSB of DH with turnaround time (TAT) < 24 hours



AED Triage – FTOCC Risk Assessment



Patient Isolation

1. Nurse in **Airborne Infection Isolation Room (AIIR)** (i.e. with negative pressure and at least 12 ACH) en-suite with toilet facility, in an isolation ward setting)
2. Implement **Airborne, Droplet and Contact Precautions** in addition to Standard Precautions
3. PPE: N95 respirator, goggles / face shield, gown, gloves, and cap (optional) for aerosol-generating procedures and routine patient care

Face shield / goggles / eye visors

N95 respirator

Fluid resistant gown

Disposable gloves



Case Referral

- Cases fulfilled the reporting criteria should be isolated at local hospitals.
- Cases fulfilled the reporting criteria screened at Boundary Control Points will be admitted to catchment hospitals' isolation wards under the prevailing port health referral mechanism.
- All confirmed cases with novel coronavirus will be referred to HA IDC for case management.

Referral of Infectious Diseases from Boundary Control Points to HA Hospitals

Version: 22.10.2019

Compulsory Referral of Infectious Diseases from BCPs to HA Hospitals

(1) For suspected Novel Influenza A (including Avian Influenza), Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS), Cholera cases

Boundary Control Point (BCP) 出入境管制站	Referring Hospital 轉介醫院管理局醫院	Cluster Coordinator & Contact Number(s) 聯絡人及聯絡電話
HK Macau Ferry Terminal (港澳碼頭)	Queen Mary Hospital 瑪麗醫院 Address: 102 Pokfulam Road, Hong Kong	A&E in charge Tel: 2255 3709 (Back up: A&E nursing staff, Tel: 2255 3007)
China HK Ferry Terminal (中港碼頭)	Queen Elizabeth Hospital 伊利沙伯醫院 Address: 30 Gascoigne Road, Kowloon	If aged below 18 - Paed A9 MO via operator, Tel: 3506 8887 If aged 18 or above - · Adult isolation ward in-charge, Tel: 3506 5124 · Adult ICU on call via operator, Tel: 3506 8887
Ocean Terminal (海運碼頭)		
Hung Hom Railway Terminal BCP (紅磡管制站)		
West Kowloon Station (西九龍高鐵站)		
Kai Tak Cruise Terminal (啟德郵輪碼頭)	United Christian Hospital 基督教聯合醫院 Address: 130 Hip Wo Street, Kwun Tong, Kowloon	A&E Nursing staff in charge Tel: 3949 4125 (Back up: Dr. Kitty Fung, Tel: 5215 6456)
Lo Wu BCP (離洲管制站)	North District Hospital 北區醫院 Address: 9 Po Kin Road, Sheung Shui, New Territories	AED Nurse in charge Tel: 2683 7230
Lok Ma Chau Spurline BCP (落馬洲支線管制站)		
Lok Ma Chau BCP (落馬洲管制站)		
Sha Tau Kok BCP (沙頭角管制站)		
Man Kam To BCP (文錦渡管制站)		
Heung Yuen Wai BCP (香園圍管制站)		
Shenzhen Bay Port BCP (深圳灣管制站)	Tuen Mun Hospital 屯門醫院 Address: 23 Tsing Chung Koon Road, Tuen Mun, New Territories	Infection Control Unit Tel: Operator 2468 5111, Extension 9
Tuen Mun Terminal (屯門客運碼頭)	Princess Margaret Hospital 瑪嘉烈醫院 Address: 2-10 Princess Margaret Hospital Road, Lai Chi Kok, Kowloon	Infectious Disease Centre If aged below 18 – Tel: 2990 2950 If aged 18 or above – Tel: 2990 3024
Shek Kong Stabling Sidings (石崗列車停放處)		
Hong Kong International Airport (香港國際機場)	Princess Margaret Hospital 瑪嘉烈醫院 Address: 2-10 Princess Margaret Hospital Road, Lai Chi Kok, Kowloon	Infectious Disease Centre If aged below 18 – Tel: 2990 2950 If aged 18 or above – Tel: 2990 3024
Hong Kong – Zhanhai – Macao Bridge Hong Kong Port BCP (港珠澳大橋香港口岸管制站)		

Case Reporting Criteria

Severe Respiratory Disease associated with a Novel Infectious Agent
(嚴重新型傳染性病原體呼吸系統病)

Clinical criteria		Epidemiological criteria
<ul style="list-style-type: none">• Patient presented with fever and acute respiratory illness, OR <ul style="list-style-type: none">• With pneumonia	AND	Travel history to Wuhan (武漢市) within 14 days before onset of symptoms (irrespective of any exposure to wet market of seafood market)

Notification

- With effect from 8 January 2020, “Severe Respiratory Disease associated with a Novel Infectious Agent” is a **statutorily notifiable disease** under the Prevention and Control of Disease Ordinance (Cap 599).
- Clinicians should report any suspected case to CHP and HAHO via **NDORS/eNID**.
- RCS and SMS messages to alert relevant stakeholders
- For cases admitted to **ICU or died, please call MCO** of CHP at 71163300-9179 immediately.

Restricted
FORM 1
PREVENTION AND CONTROL OF DISEASE ORDINANCE
(Cap. 599)
Notification of Infectious Diseases other than Tuberculosis

Particulars of Infected Person

Name in English:	Name in Chinese:	Age / Sex:	I.D. Card / Passport No.:
Residential address:			Telephone No. (Home):
Name and address of workplace / school:			(Mobile):
Job title / Class attended:			(Office / school / others):
Hospital / Clinic sent to (if any):			Hospital / A&E No.:

Disease ["✓"] below Suspected / Confirmed on ____/____/____ (Date: dd/mm/yyyy)

<input type="checkbox"/> Acute poliomyelitis <input type="checkbox"/> Amoebic dysentery <input type="checkbox"/> Anthrax <input type="checkbox"/> Bacillary dysentery <input type="checkbox"/> Botulism <input type="checkbox"/> Chickenpox <input type="checkbox"/> Chikungunya fever <input type="checkbox"/> Cholera <input type="checkbox"/> Community-associated methicillin-resistant <i>Staphylococcus aureus</i> infection <input type="checkbox"/> Creutzfeldt-Jakob disease <input type="checkbox"/> Dengue fever <input type="checkbox"/> Diphtheria <input type="checkbox"/> Enterovirus 71 infection <input type="checkbox"/> Food poisoning Number of persons known to be affected: ____ Place and date of consumption (e.g. "XXX Restaurant in Mong Kok"): ____ Date of consumption: ____	<input type="checkbox"/> <i>Haemophilus influenzae</i> type b infection (invasive) <input type="checkbox"/> Haemurine infection <input type="checkbox"/> Invasive pneumococcal disease <input type="checkbox"/> Japanese encephalitis <input type="checkbox"/> Legionnaires' disease <input type="checkbox"/> Leprosy <input type="checkbox"/> Leptospirosis <input type="checkbox"/> Listeriosis <input type="checkbox"/> Malaria <input type="checkbox"/> Measles <input type="checkbox"/> Meningococcal infection (invasive) <input type="checkbox"/> Middle East Respiratory Syndrome <input type="checkbox"/> Mumps <input type="checkbox"/> Novel influenza A infection <input type="checkbox"/> Paratyphoid fever <input type="checkbox"/> Plague <input type="checkbox"/> Q fever <input type="checkbox"/> Rabies <input type="checkbox"/> Relapsing fever	<input type="checkbox"/> Rubella and congenital rubella syndrome <input type="checkbox"/> Scarlet fever <input type="checkbox"/> Severe Acute Respiratory Syndrome <input type="checkbox"/> Severe Respiratory Disease associated with Novel Infectious Agent <input type="checkbox"/> Shiga toxin-producing <i>Escherichia coli</i> infection <input type="checkbox"/> Smallpox <input type="checkbox"/> Streptococcus suis infection <input type="checkbox"/> Tetanus <input type="checkbox"/> Typhoid fever <input type="checkbox"/> Typhus and other rickettsial diseases <input type="checkbox"/> Viral haemorrhagic fever <input type="checkbox"/> Viral hepatitis <input type="checkbox"/> West Nile Virus Infection <input type="checkbox"/> Whooping cough <input type="checkbox"/> Yellow fever <input type="checkbox"/> Zika Virus Infection
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Notified under the Prevention and Control of Disease Regulations by
 Dr. _____ of _____ Hospital / Clinic / Private Practice
 (Full Name in BLOCK Letters) Ward / Unit / Specialty on ____/____/____ (Date: dd/mm/yyyy)
 Telephone No. _____ Fax No. _____ (Signature)
 Remarks: _____

DH (Rev. August 2018)



Patient-specific Function(s)

病人 +Reminder PMI Alert

PATIENT, 9959

F	67y	DOB: 15-Apr-1952	D007097(2)	LTP	L1	Adm: 09-Apr-1998	HN98025688(5)
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NDORS X

eNID for Enhanced Surveillance for cases related to Wuhan Reporting Criteria (New Record) Back to Main Screen

Condition:* Satisfactory Stable Serious Critical

Ventilated: Yes No ECMO Service applied: Yes No

ICU admission date: ICU discharge date: ICU discharge destination:

NICU/PICU admission referred from private hospitals Private Hospital Name: Current reporting doctor's contact *:

Lab results related to Respiratory infection within 3 months

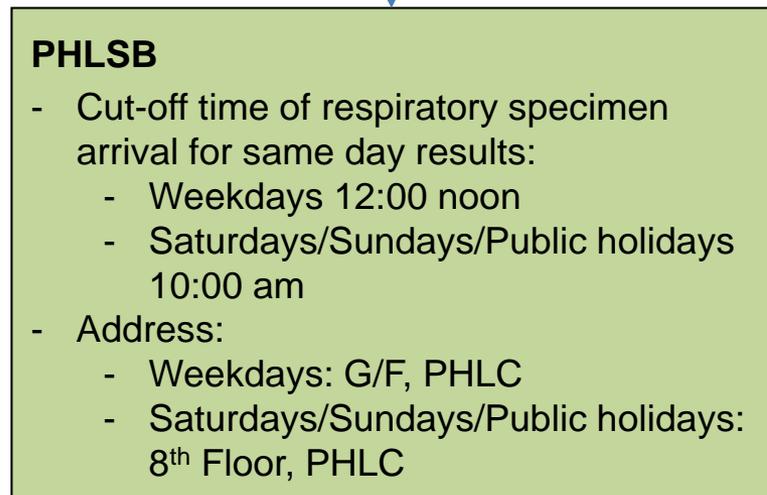
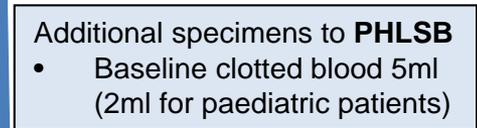
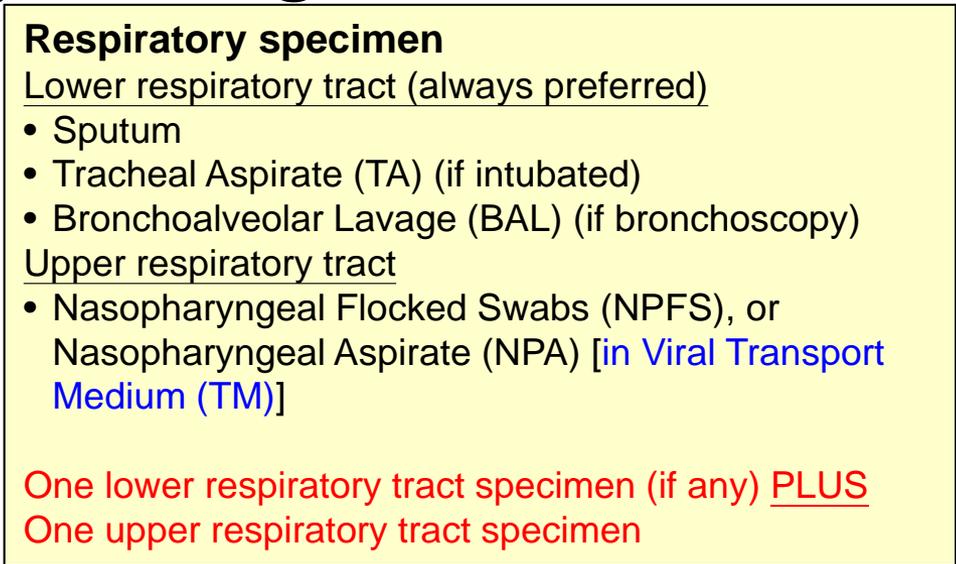
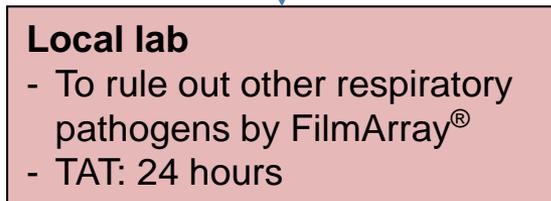
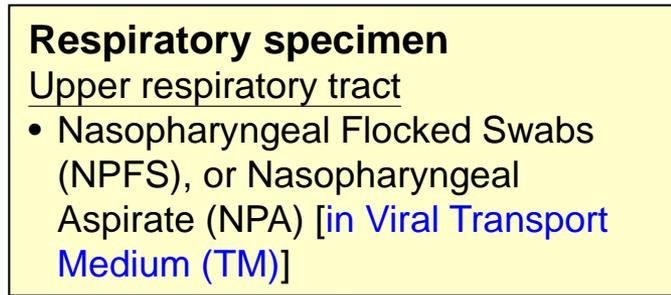
Result Ready Date	Request Hosp	Performing Lab	Specimen	Lab Test Name	Lab Result
1	NDH	PWH	Sputum	Respiratory syncytial virus RNA, RT-PCR	T/F
2	NDH	PWH	Nasopharyngeal aspirate	Respiratory syncytial virus RNA, RT-PCR	T/F
3	NDH	PWH	Sputum	Parainfluenza virus 4 RNA, RT-PCR	T/F

- [Clinical Criteria](#)
- [Epidemiological Criteria](#)
- [High Risk Patient Checklist](#)
- [Laboratory Results](#)
- [Treatment](#)
- [Status Change Log](#)

Signs and Symptoms:

<input type="checkbox"/> Fever	Onset Date: <input type="text"/>	<input type="checkbox"/> Myalgia	Onset Date: <input type="text"/>
<input type="checkbox"/> Chills	Onset Date: <input type="text"/>	<input type="checkbox"/> Fatigue	Onset Date: <input type="text"/>
<input type="checkbox"/> Cough	Onset Date: <input type="text"/>	<input type="checkbox"/> Headache	Onset Date: <input type="text"/>
<input type="checkbox"/> Sore throat	Onset Date: <input type="text"/>	<input type="checkbox"/> Diarrhoea	Onset Date: <input type="text"/>
<input type="checkbox"/> Pneumonia	Onset Date: <input type="text"/>	<input type="checkbox"/> Vomiting	Onset Date: <input type="text"/>
<input type="checkbox"/> Dyspnoea	Onset Date: <input type="text"/>	<input type="checkbox"/> Unexplained acute respiratory illness	Onset Date: <input type="text"/>
Others: <input type="text"/>	Onset Date: <input type="text"/>		

Laboratory Investigation



- SHS for additional specimen transportation during Saturdays, Sundays, and Public Holidays is included under winter surge programmes.

Enhanced Laboratory Surveillance for Novel Coronavirus (nCoV) related to pneumonia cases in Wuhan (Effective from 13 Jan 2020)

Any pneumonia case:

- with unknown causes (not responding to treatment in 3 days); or
- requiring ICU care; or
- occurring in clusters; or
- who is a healthcare worker

irrespective of their travel history.

- Any case scenario apart from the above inclusion criteria should be assessed by hospital Infection Control Officer or Infectious Disease Physician for the testing of novel coronavirus.

Memorandum	
From : CM(IEC), HAHO	To : CCEs & HCEs, All medical staff
Ref : HA752/10/38/70	cc : Directors' Meeting,
Tel : 2300 6456	COC(Med), COC(Paed), COC(Path),
Fax : 2300 7701	COC(A&E), COC(ICU), COC(FM),
Date : 13 January 2020	CCIDER, ICs & ICNs, Cluster MICCs

Enhanced Laboratory Surveillance for Novel Coronavirus (nCoV) related to pneumonia cases in Wuhan

For the purpose of early identification of severe community-acquired pneumonia associated with emerging infections, the Centre for Health Protection (CHP) and HA Central Committee on Infectious Diseases and Emergency Response (CCIDER) recommended the enhanced laboratory surveillance, such as Avian Influenza (AI) and Middle East Respiratory Syndrome (MERS) since 2012 (Annexes I & II).

In view of the latest situation of the cluster of pneumonia cases caused by novel coronavirus (nCoV) in Wuhan (武漢市) and the start of Spring Festival travel, the CHP and the HA CCIDER recommend to extend the enhanced laboratory surveillance to nCoV-associated pneumonia cases.

Inclusion criteria
Any pneumonia case:

- with unknown causes (not responding to treatment in 3 days); or
- requiring ICU care; or
- occurring in clusters; or
- who is a healthcare worker

irrespective of their travel history.

Any case scenario apart from the above inclusion criteria should be assessed by hospital Infection Control Officer or Infectious Disease Physician for the testing of novel coronavirus.

Actions required

- 1) Specimen should be taken for cases fulfilling the above inclusion criteria and sent to PHLC for RT-PCR for novel coronavirus.
- 2) Specify "Testing for novel coronavirus" on the laboratory request form.
- 3) Cases with positive results of novel coronavirus should be isolated in airborne

Actions required:

1. Specimen should be taken for cases fulfilling the above inclusion criteria and sent to PHLC for RT-PCR for novel coronavirus.
2. Specify "Testing for novel coronavirus" on the laboratory request form.
3. Cases with positive results of novel coronavirus should be isolated in airborne infection isolation room (AIIR) and reported to NDORS immediately.

Specimen Transport

- All specimens are required to be sent via hospital courier services to HA laboratories, PHLSB and QMH laboratories to suit the local lab workflow.
- Clusters are advised to explore the available courier services to support the delivery of the specimens. In case of any difficulties encountered, clusters could contact networked clusters or HO BSSD in accordance with the Response Plan of Business Support Services in Handling Major Incidents for coordination of cross-cluster support for transporting specimens.
 - First priority: hospital courier service
 - Second priority: contract out service is acceptable

Clinical Management

- General Clinical Management
 - Monitor vital signs and organ functions, and recognize complication(s) early
 - Liaise with ICU early for intensive care if anticipate clinical deterioration
 - Provide supportive treatments
 - Oxygen
 - IV fluid
 - Inotropic support +/-steroid* (septic shock)
 - Mechanical ventilation +/-ECMO (respiratory failure)
 - Renal dialysis (renal failure)
- Potential specific anti-viral agents with available stocks in HA pharmacy
 - Kaletra
 - Interferons (interferon- β , interferon- γ)
 - Ribavirin

Release from Isolation

Revised principle to be considered for releasing SUSPECTED case from isolation (NOT applicable to probable case)

1. For patient with known etiology which can explain the clinical presentation AND has clinical improvement AND **negative RT-PCR for SARS CoV related virus** AND consensus obtained from MCO of CHP
OR
2. For patient without known etiology but has clinical improvement AND fever subsided for 24 hours AND chest X-ray is clear/improving AND **negative RT-PCR for SARS CoV related virus** AND consensus obtained from MCO CHP

Patient Care Equipment

1. Handle used/soiled patient-care equipment carefully to prevent skin and mucous membrane exposures, contamination of clothing, and transfer of microorganisms to other patients and environment
2. **Designate non-critical patient care equipment** to the patients. If sharing is unavoidable, clean and disinfect with sodium hypochlorite solution 1,000 ppm after each patient use
3. **Respiratory therapy equipment require high-level disinfection.** Central reprocessing is preferred based on local hospital policy. Well-packed contaminated items before transfer to prevent environmental contamination

Environmental Control

1. Decontaminate the environment regularly and immediately when becomes visibly soiled
2. Decontaminate patient environment, especially high-touch areas, at least once daily in general clinical areas
3. Clean and disinfect with **sodium hypochlorite solution 1,000 ppm twice daily in high risk areas** with suspected and confirmed patients
4. Perform terminal disinfection upon each patient discharge
5. Strengthen cleaning schedule as advised by HICT

Linens Handling

1. All linen should be classified as infected linen. Linen bag should be secured with “**infected linen**” tag with information of the origin.
2. Avoid sorting linens in patient-care areas.
3. Place linen into **water soluble bag**, then a **laundry bag** with minimal manipulation or agitation to avoid contamination of air, surfaces and persons.



Waste Management

- All wastes from suspected or confirmed patients are classified as **clinical waste**
- Use bedpan washer to clean and thermal disinfect the urinals and bedpans
- Follow HA Operation Circular No. 4/2015 Implementation of Clinical Waste Management Plan (CWMP) for proper handling and disposal of clinical wastes



Cleaning of Spills of Blood and Body Fluids

1. Clean the visible soils with disposable absorbent material and discard it into the appropriate waste bag
2. Mop the area with a cloth or paper towels wetted with sodium hypochlorite solution 10,000 ppm, leave for 10 minutes
3. Then rinse with water and allow the area to air dry
4. 70% alcohol can be used in metal surface if household bleach is contraindicated

Handling of Dead Body

1. Handling and disposal of dead body according to **Cat. 2**
2. Use YELLOW label
3. Follow the additional precautions as recommended in “Precautions for Handling and Disposal of Dead Bodies, 10th edition.” https://www.chp.gov.hk/files/pdf/grp-guideline-hp-ic-precautions_for_handling_and_disposal_of_dead_bodies_en.pdf

	Danger of Infection 小心傳染			Category 類別 2
	In handling dead bodies, Standard Precautions are required. 處理屍體時需要採取標準預防措施。 In addition, the following precautions are also required: 此外，下列附加的預防措施亦必須採納：			
	Bagging 入屍袋	Viewing in funeral parlour 殯儀館內瞻仰遺容	Embalming 防腐處理	Hygienic preparation in funeral parlour 殯儀館內裝身及化妝
Must 必須	Allowed 可以	Not allowed 不可以	Allowed with disposable gloves, apron and surgical mask 可以，但必須戴上用後即棄的手套、圍裙和外科口罩	

Patient Transport

1. Limit patient transport to essential purpose only
2. Wear appropriate PPE when handling patients
3. Provide **surgical mask to patients** during transportation if not contraindicated
4. Inform the receiving ward/ parties before patient transport to facilitate appropriate arrangement.
5. Inform the administration to prepare the designated route for transport. The involved area should be disinfected afterwards.
6. Disinfect transport vehicles after use

Enhanced Measures under S2

Enhanced Measures under S2

- Universal masking at **all clinical areas**, including waiting halls of AEDs, OPDs and pharmacy offices
 - Patients at medical wards are encouraged to put on surgical masks as far as possible.
 - Hospitals will provide surgical masks to patients and visitors if necessary.
- ILI Segregation Areas at AEDs
- All **Aerosol-generating procedures (AGPs)** should be conducted under **airborne precautions**.



Aerosol-generating Procedures (AGPs)

AGP

Non-invasive ventilation (NIV)

Logistic flowchart for the initiation of NIV in AED

Logistic flowchart for the initiation of NIV in HA hospitals

AGP other than NIV

1. Endotracheal intubation
2. Cardiopulmonary resuscitation (CPR)
3. Bronchoscopy
4. Open suctioning of respiratory tract (including tracheostomy care)
5. Autopsy
6. High-frequency oscillatory ventilation
7. Nebulizer therapy
8. Sputum induction

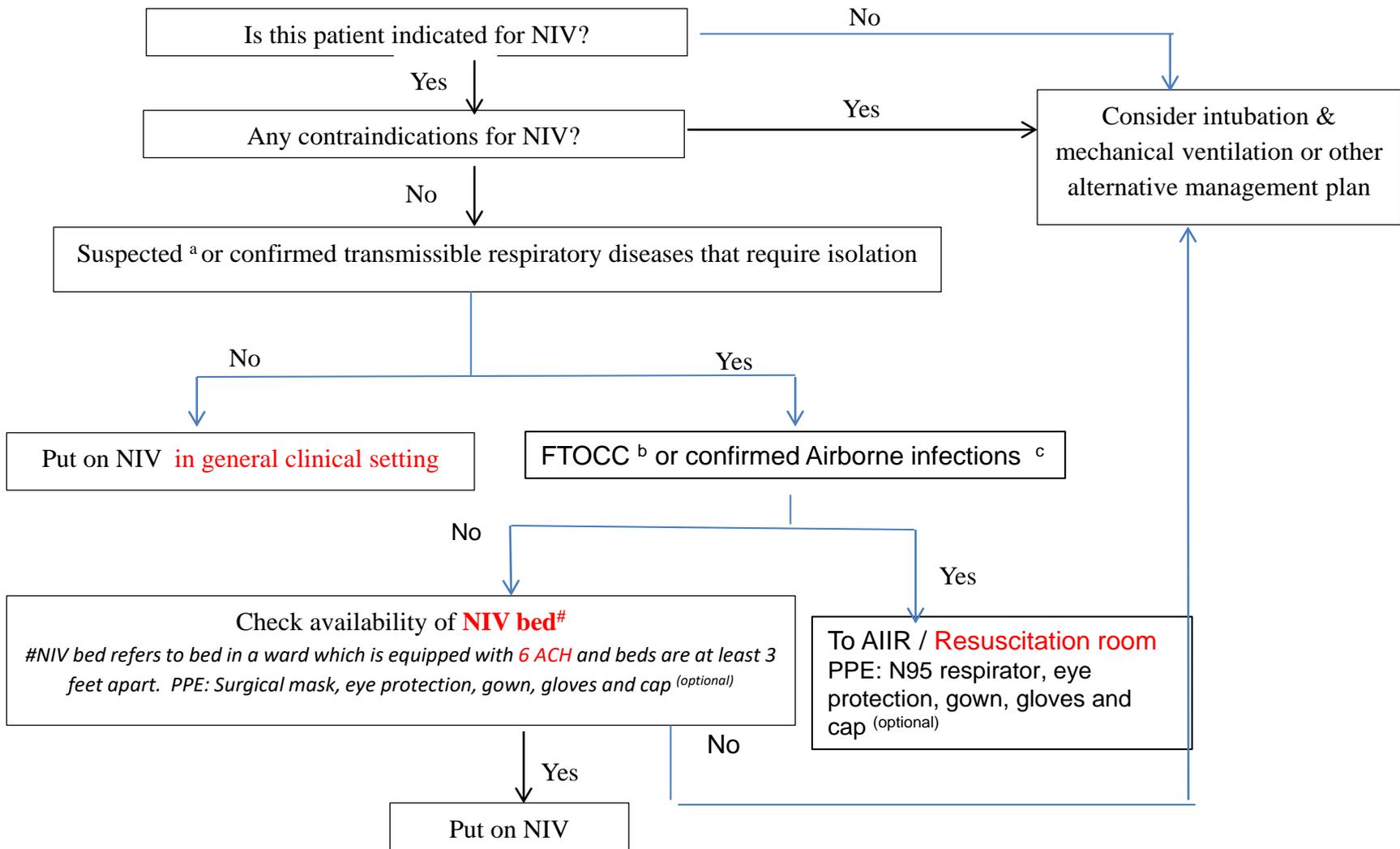
Risk assessment

Aerosol-generating Procedures (AGPs)

- All AGPs should be conducted under airborne precautions.
- In high risk patient areas, place patient in a negative pressure **airborne infection isolation room (AIIR)** before performing AGPs.
- In other patient areas, place patient in a **well-ventilated area** (e.g. at least minimum overall 6 air changes per hour (ACH) or use portable HEPA filter e.g. IQ Air if indicated) before performing AGPs.

Logistic flowchart for the initiation of **NIV** in Accident and Emergency Department (AED)

[Reference from Communication kit for MERS]



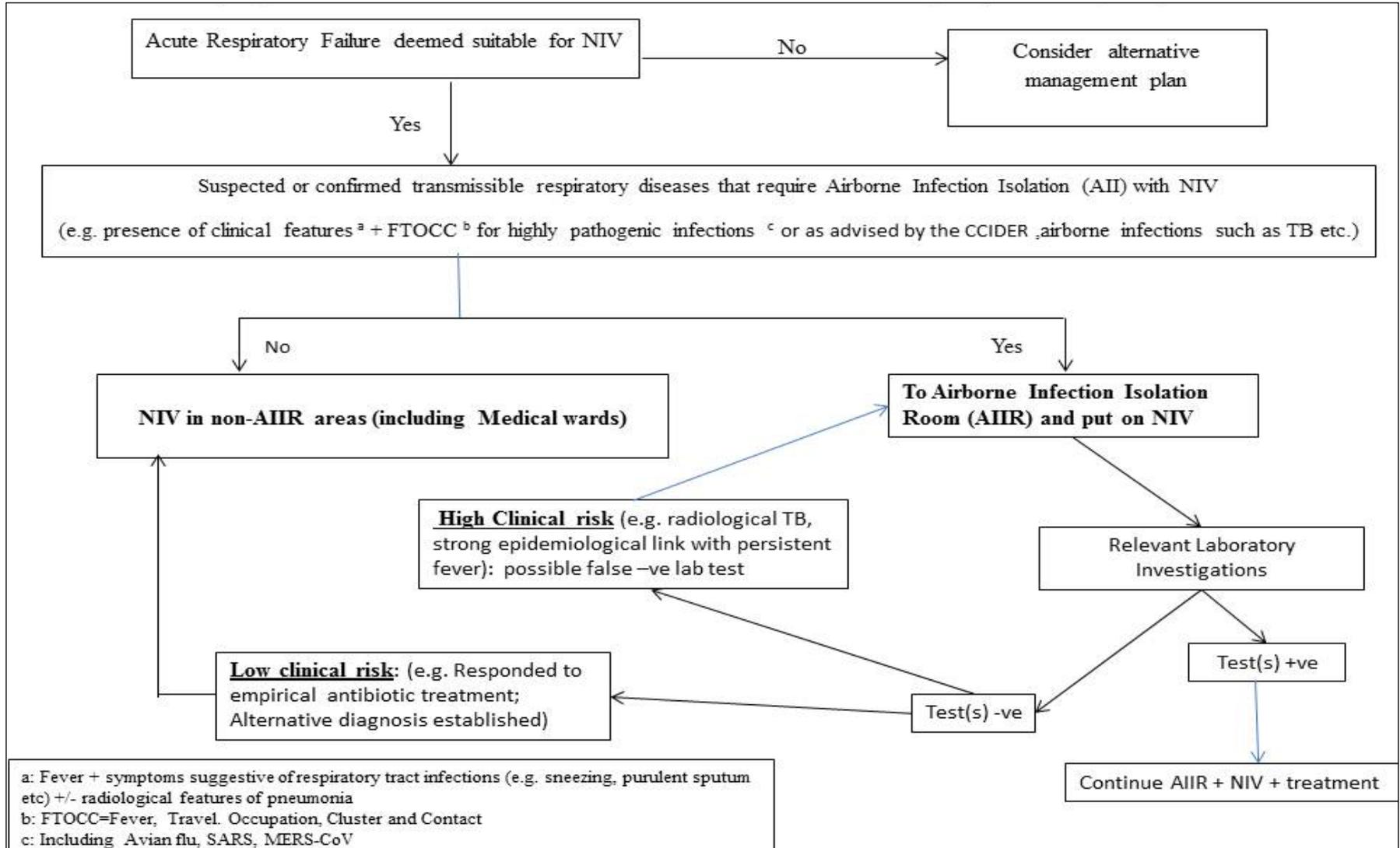
a: Suspected transmissible respiratory diseases: fever with features suggestive of respiratory tract infections (e.g. sneezing, purulent sputum etc) +/- radiological features of pneumonia

b: FTOCC=Fever, Travel, Occupation, Cluster and Contact

c: Disease requiring airborne precautions: such as avian flu, SARS or MERS-CoV, PTB, emerging respiratory viruses

Logistic Flowchart for the Initiation of Non-invasive Ventilation (NIV) in HA hospitals

[Reference from HA Infection Control Plan (MERS) Version 3.1 (Oct 2018)]



Supplementary Notes for NIV

[Reference from Communication kit for MERS]

- All patients who have fulfilled the reporting criteria for **novel influenza, MERS-CoV and SARS should have been isolated promptly in AIIR** already;
- The “**FTOCC**” **screening criteria applied** in the flowchart above refers to cases with “Fever” and one or more of “T: travel to an affected areas during the incubation period”/”O”:occupational related/”C”:contact of a suspected/confirmed case/”C”:cluster of cases detected.
- “Relevant” laboratory investigations refer to tests ordered after clinical and epidemiological assessments
- The possibility of having insufficient AIIR if there is a large number of such patients (e.g. during epidemics and major outbreaks of novel infections) exists
- Manpower issue: increased nursing workload in the isolation areas with NIV cases
- Similar concerns for NIV exist in other aerosol generating procedures
- The flowchart should be read in parallel with the latest Respiratory Consensus Statement on NIV, which can be found in the Hong Kong Respiratory Medicine webpage http://hkts.com2.hk/site/HKTS/upload/editorfile/file/20171117/20171117192543_71234.pdf

NPA, NPS & High Flow Oxygen

- Collection of Nasopharyngeal aspiration (NPA) and nasopharyngeal swab (NPS), and use of high flow oxygen ($\geq 6\text{L}/\text{min}$) are not considered as AGPs in international recommendations, but they are **theoretically at risk of dispersal of infectious respiratory droplets**, therefore with a more **cautious approach**, they should be performed in conditions as required for aerosol-generating procedures in high-risk patient areas.
- Other procedures should be assessed on discretion of hospital Infection Control Officers.

Special Consideration

(Consensus in the 4th ad hoc CCIDER meeting on 14 Jan)

- **Respiratory care: open suctioning of respiratory tract and sputum induction in convalescent hospitals**
 - Taking into consideration of **long stay patients** who have been undergone **FTOCC risk assessment** and hospitalized for **more than 14 days**, staff should wear a **surgical mask / N95 respirator** for open suctioning or sputum induction in accordance with Standard Precautions and Transmission-based Precautions (if indicated).
 - Hospital Infection Control Teams, with directives given by CCE, would work with different clinical departments for assessment.

Special Consideration

(Consensus in the 4th ad hoc CCIDER meeting on 14 Jan)

➤ Specimen collection for nasopharyngeal swab (NPS)

- Risk assessment should be performed prior to NPS collection, and droplet precautions could be applied provided that the following criteria are met:
 - i) No confirmed nCoV case is reported in Hong Kong; AND
 - ii) Patient does not fulfill FTOCC; AND
 - iii) Patient is not clinically suspected to have airborne infections or emerging infectious diseases, such as AI, MERS-CoV and nCoV.

Special Consideration

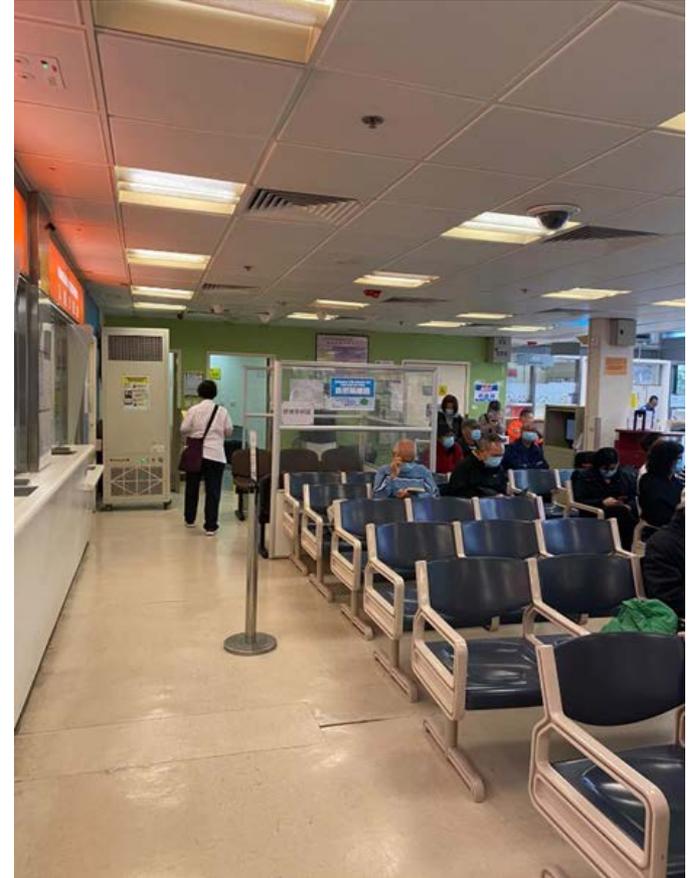
(Consensus in the 4th ad hoc CCIDER meeting on 14 Jan)

- Patient requiring high flow oxygen ($\geq 6\text{L}/\text{min}$)
 - If an airborne infection isolation room (AIIR) is not available in high risk area such as A&E and GOPC, the patient should be arranged in an area with **portable HEPA filter** (e.g. IQ Air) and physical barrier.



Enhanced ventilation at A&E & GOPC waiting areas

- Completed the widest opening of the fresh air dampers in the air handling equipment in the waiting areas of A&E and GOPCs to achieve higher fresh air rate with improved air dilution; and
- Completed wheeling in mobile HEPA units to augment the total air change rates in A&E waiting areas where necessary.



Example:
HEPA unit is placed at QEH A&E

Enhanced Measures under S2

➤ Isolation facilities utilization

- ~1400 airborne infection isolation (AIIR) beds available
- Daily monitoring of utilization
- Re-designate the use to meet surge admission if necessary

➤ PPE 90-day stockpile

- Daily monitoring of usage
- A two-tier communication mechanism for the supply of PPE, laundry and linen.

➤ Alcohol-based hand rub (ABHR)

- 3 months additional backup stock

➤ ECMO machine utilization

- ECMO referral network
- Daily monitoring of usage



Airborne Infection Isolation (AIIR) bed occupancy report on 1/7/2020 12:00 [Print](#) [Export to excel](#)

		All beds in Isolation wards										All beds in General wards
		under AIIR-mode ventilation					Ready for admission		under non-AIIR mode ventilation		Total	
Cluster	Hospital	Designated AIIR beds	Occupied for AIIR purpose	% Bed occupied for AIIR purpose		Vacant beds	Occupied by not AIIR purpose					
		a	b	b/a		a-c	c-b	d-a	d	e		
HKE	PYN	20	13	65%		6	1	96	116	3		
HKE	RH	5	0	0%		5	0	18	23	0		
HKE	TOTAL	25	13	52%		11	1	114	139	3		
HKW	QMH	25	5	20%		10	10	63	88	0		
HKW	TOTAL	25	5	20%		10	10	63	88	0		
KC	KWH	52	1	2%		16	35	6	58	0		
KC	QEH	42	14	33%		16	12	107	149	0		
KC	TOTAL	94	15	16%		32	47	113	207	0		
KE	TKO	17	0	0%		6	11	39	56	0		
KE	UCH	36	5	14%		9	22	78	114	0		
KE	TOTAL	53	5	9%		15	33	117	170	0		
KW	CMC	0	0	N/A		0	0	20	20	44		
KW	NLT	0	0	N/A		0	0	0	0	8		
KW	PMH	84	9	11%		41	34	24	108	8		
KW	YCH	24	6	25%		13	5	0	24	0		
KW	TOTAL	108	15	14%		54	39	44	152	60		
NTE	AHN	20	14	70%		2	4	58	78	0		
NTE	NDH	8	4	50%		3	1	28	36	0		
NTE	PWH	96	13	14%		27	56	60	156	12		
NTE	TOTAL	124	31	25%		32	61	146	270	12		
NTW	POH	0	0	N/A		0	0	0	0	18		
NTW	TMH	56	9	16%		30	17	76	132	0		
NTW	TOTAL	56	9	16%		30	17	76	132	18		
GRAND	TOTAL	485	93	19%		184	208	673	1158	93		

PPE	90-Day Contingency Stock
Goggles / Eye Shield	187,200
Face Shield	765,000
Surgical Mask	38,970,010
N95 Respirator	1,377,000
Disposable Isolation Gown	2250,000
Examination Gloves, Disposable (in pair)	26,099,950
Disposable Cap	900,000

Enhanced Measures under S2

- Respirator fit test program
 - Hospital Infection Control Teams have revisited and offered the N95 respirator fit test program to all healthcare workers, in particular for those who work in high risk area.

- Pregnant staff
 - All pregnant staff should not be deployed into the high risk areas as stipulated in the Human Resources Circular (No.13/2013).
<http://ha.home/circular2/Hr-2013-13.pdf>

- Blood donation arrangement
 - The HA Blood Transfusion Service (BTS) Expert Panel on Blood and Blood Products Safety has reviewed the blood donation arrangement. Members of public who have visited Wuhan should defer blood donation for 14 days from the date of departure.

Respiratory Protection Program for Healthcare Workers

- Before initial use of N95 respirator, fit test should be performed to select a suitable type, model and size of respirator for individual respirator user. Test results should be maintained according to local hospital protocol.
- Qualitative Fit Test (QLFT) and Quantitative Fit Test (QNFT)
- Maintain Fit Test results record



Repeat of N95 Respirator Fit Test

Under the following circumstances, retest of fit test should be done:

- A significant change on facial contour affecting the respirator fit
- A significant increase or decrease in weight (10%)
- Change in facial structure or scarring due to dental work, cosmetic surgery or accidents
- When no supply of appropriate model or size of respirator
- Any other condition that may interfere with face-piece sealing

Enhanced Measures under S2

➤ Visiting hours

- Acute hospitals: not more than 2 hours per day and 2 visitors per visit
- Convalescent hospitals: not more than 4 hours per day and 2 visitors per visit

➤ Volunteer service

- Should be suspended unless directives given by Cluster Chief Executive (CCE) and Hospital Infection Control Team based on risk assessment.
- Advice from CCC on 15 Jan, chaplaincy, non-statutory JP visits, education service provided by HK Red Cross, and Playright's Hospital Play Service should be suspended.

➤ Clinical attachment (including research activities)

- Should be avoided in high risk areas. For other patient areas, directives on suspension will be given by CCC.

Staff Early Sickness Alert System (SESAS)

For early detection and control of potentially communicable infectious diseases / outbreaks

Staff Early Sickness Alert System (SESAS) 職員初期病徵預警系統

醫管局員工病徵速報
HA Staff Sickness Reporting

如出現以下病徵，請通知你的上司以紀錄在**職員初期病徵預警系統**。
If you have the following symptoms, please inform your supervisor to record in **Staff Early Sickness Alert System (SESAS)**.

發熱 **Fever**
肌肉疼痛 **Myalgia**
發冷 **Chills**
咽喉疼痛 **Sore Throat**
肺炎 **Pneumonia**
流涕 **Running Nose**
嘔吐 **Vomiting**
咳嗽 **Cough**
腹瀉 **Diarrhoea**

詳情請參閱內聯網：
Please visit Intranet for details: <http://sesas.home/>

如有疑問，請盡快聯絡醫院感染控制小組或總感染控制主任辦公室。
For any enquiries, please contact Hospital Infection Control Team or CICO office.

User Login(使用者登入)

Logon Name(登入名稱) :

Password(密碼) :

Domain Name(網域名稱) :

Save my "NT Domain" and "User Name" for next login
儲存我的"網域"和"使用者名稱"作下次之用

General enquiries (一般查詢) : [Infection Control Team \(感染小組\)](#)
[Email to HAD@-HR](#) | [Other Requests\(其他申請事項\)](#)

[User Manual/使用者手冊](#) [User Guidelines/使用者守則](#)

If you have any query please contact (IT Call Center) 2515-2653 OR input your query by clicking following link (Business Support Desk):
如有任何查詢，請致電 (IT Call Center) 2515-2653 或 按以下連結 (Business Support Desk) 輸入查詢問題：
[Business Support Desk - http://www.dcis02/bsd/hotline_login.asp](http://www.dcis02/bsd/hotline_login.asp)

News 最新消息
HKID is replaced by Employee Number during sickness reporting. In the interest of personal data privacy, HKID is no longer required for reporting sickness for colleagues not on the list of "MyTeam". For non-HA staff and in case the Employee Number is not available, the Employee Number field can be left blank and the system will generate a reference number for record purpose.
在報病過程中，「職員號碼」已取代了「香港身份證號碼」。為了保護個人資料私隱，為其他人(非職員)報病時，已不再需要

Risk Communication

Internal:

- Designated webpage
- Communication kit
- Staff forums
- HASLink Express
- HR Apps
- HA Touch

External:

- Daily press release on no. of reported cases in the past 24 hours
- Facebook

Stay Vigilant

- HA will continue to work with CHP in monitoring the latest situation and reinforce the preparedness and risk communications

Thank You