

Infection control issues relating to the novel coronavirus – What should a healthcare worker know?

Anthony Ng

APN

ICB, CHP / IDCTC, HA

Contents

- **Summary of the current situation on Novel Coronavirus**
- **Guidelines and recommendations on infection control**
 - **Healthcare professionals**
 - **General public**
 - **Institutions / Business**
- **Useful links**

Novel Coronavirus – Situation update (as of 14 Dec 2012)

- Nine laboratory-confirmed cases (5 deaths) have been reported to WHO
 - Two cases (both recovered) from Qatar
 - No epi-link
 - Five cases (3 deaths) from Kingdom of Saudi Arabia (KSA)
 - First two cases: no epi-link (1 died)
 - **Three other cases: from the same household** (2 died)
 - Two cases (both fatal) from Jordan
 - **These cases were discovered through testing of stored samples from a cluster of pneumonia cases that occurred in April 2012**
- The two clusters from KSA and Jordan raise **the possibility of limited human-to-human transmission** or, alternatively, **exposure to a common source**
- The current understanding of this novel virus is that it can cause a severe, acute respiratory infection presenting as pneumonia. Acute renal failure has also occurred in five cases

Infection control issues relating to the novel coronavirus

- The recommendations are based on the current knowledge and information
 - It may revise if new information is available

Guidelines and Recommendations on Infection Control

For healthcare professionals

IC measures for suspected or confirmed patients with Severe Respiratory Disease (SRD) associated with novel coronavirus – in HA hospitals

Adopted from
“HA Infection Control forum-
Severe Respiratory Disease (SRD) associated
with NOVEL CORONAVIRUS”

version No.4 (as of 6th December 2012)

Courtesy of CICO Office

Enhanced infection control measures

- In view of the severity of illness of reported cases and uncertainty on the transmissibility of the novel coronavirus,
 - Standard, contact, droplet and airborne precautions should be implemented for all suspected or confirmed case with SRD associated with novel coronavirus

遇到下列情況，必須遵守
標準防護措施
Standard Precautions
must be taken in the following situations

Wear Gloves
when handling blood, body fluids, secretions, excretions, mucous membrane or non-intact skin

接觸血液、體液、分泌物、排泄物、黏膜或傷口
必須戴上手套

Wear a Mask, Protective Eyewear and a Gown
to protect yourself from splashed blood or body fluids

若有可能接觸濺出血液或體液
必須戴上口罩、眼罩及穿上保護衣

No Recapping

切勿套回已使用的針咀

Handle Sharps Carefully

小心處理針咀及利器

Perform Hand Hygiene Immediately
after taking off gloves or handling blood, body fluids, secretions, excretions, mucous membrane or non-intact skin

接觸血液、體液、分泌物、排泄物、黏膜、傷口，或除下手套後
應立即潔手



Patient placement

Placement of suspected / confirmed case with SRD associated with novel coronavirus

- Airborne Isolation Infection Room (AIIR) with negative pressure [apply both AIIR with /without anteroom)
- **Single Airborne Infection Isolation Room for suspected case**
- Separate confirmed cases from suspected cases
- Cohorting suspected cases with strong epidemiological link, such as household contacts

Use of Personal Protective Equipment (PPE)

Surgical Mask

Cap

Gloves

N95 respirator

Disposable gown

Face Shield

Recommended PPE for Routine Patient Care and Performing Aerosol-Generating Procedures for SRD associated with Novel Coronavirus at Alert Response Level

Areas	Recommended PPE	
Routine patient care	High -risk patient areas * for caring of suspected or confirmed novel coronavirus infection	<ul style="list-style-type: none"> ● N95 respirator (Surgical mask could be an alternative for AED triage station base on nature of encounter upon risk assessment), eye protection , gown, gloves and cap (optional)
	Other patient areas	<ul style="list-style-type: none"> ● Standard precautions +/- Transmission based precautions
Performing aerosol-generating procedures	High -risk patient areas*for caring of suspected or confirmed novel coronavirus infection	<ul style="list-style-type: none"> ● N95 respirator, eye protection , gown, gloves and cap (optional); ● Place patient in a negative pressure airborne infection isolation room (AIIR).
	Other patient areas	<ul style="list-style-type: none"> ● Surgical mask/N95 respirator, eye protection, gown, gloves and cap (optional) ● Perform all aerosol generating procedures in a well-ventilated area (e.g. mechanical ventilation with minimum 6 air changes per hour (ACH) or use portable HEPA filter e.g. IQ Air if indicated).
No patient contact	High-risk patient areas* for suspected or confirmed novel coronavirus infection	<ul style="list-style-type: none"> ● Surgical mask
	Other patient areas	<ul style="list-style-type: none"> ● Surgical mask for signs and symptoms of respiratory infection
	Non-patient areas	

*High-risk patient areas refer to triage stations of out-patient clinics, Accident & Emergency department (triage stations, resuscitation rooms, waiting areas/consultation rooms, and fever triage cubicles), and isolation wards for suspected or confirmed novel coronavirus patients

Aerosol-generating procedures** (AGP) such as:

- Endotracheal intubation
- CPR
- Bronchoscopy
- Open suctioning of respiratory tract (including tracheostomy care)
- Autopsy
- Non-invasive positive pressure ventilation (BiPAP & CPAP)
- High-frequency oscillatory ventilation
- Nebulizer therapy
- Sputum induction

- *NPA and high flow oxygen (6L/min) are theoretically at risk of dispersal of infectious respiratory droplets in **high risk areas**, these procedures should be performed in conditions as required for AGP.*
- *Other procedures should be assessed on discretion of hospital Infection Control Officers*

Good Compliance of Hand Hygiene



5 moments for hand hygiene 五個必須潔手的時刻



Patient care equipment

- **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 environments. **Well-packed contaminated items before transfer** to prevent environmental contamination
- **Respiratory therapy equipment require high-level disinfection.** Central reprocessing is preferred based on local hospital policy
- **Designate non-critical patient care equipment to the patients.** If sharing is unavoidable, clean and disinfect properly after each patient use

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 or confirmed novel coronavirus patients
- 4 Perform terminal disinfection upon each patient discharge
- 5 Strengthen cleaning schedule as advised by ICT

Cleaning of blood spills 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 Use 70% alcohol for metallic surface

Linen Handling

- 1 Avoid shaking, excessive movement when handling used/soiled linen to prevent contamination and generation of aerosols
- 2 Well-pack the laundry bag before transport to laundry
- 3 Sorting or rinsing of contaminated linen should only be done in laundry area

Waste Management

- All waste from patients with SRD associated with novel coronavirus is classified as **clinical waste**
 - Follow HA Operation Circular No. 5/2012 Implementation of Clinical Waste Management Plan (CWMP) for proper handling and disposal of clinical wastes
- **Use bedpan washer to clean and thermal disinfect the urinals and bedpans.** Otherwise, clean the urinals and bedpans and immerse in sodium hypochlorite 1,000 ppm for 30 minutes. Wear appropriate PPE during the procedure

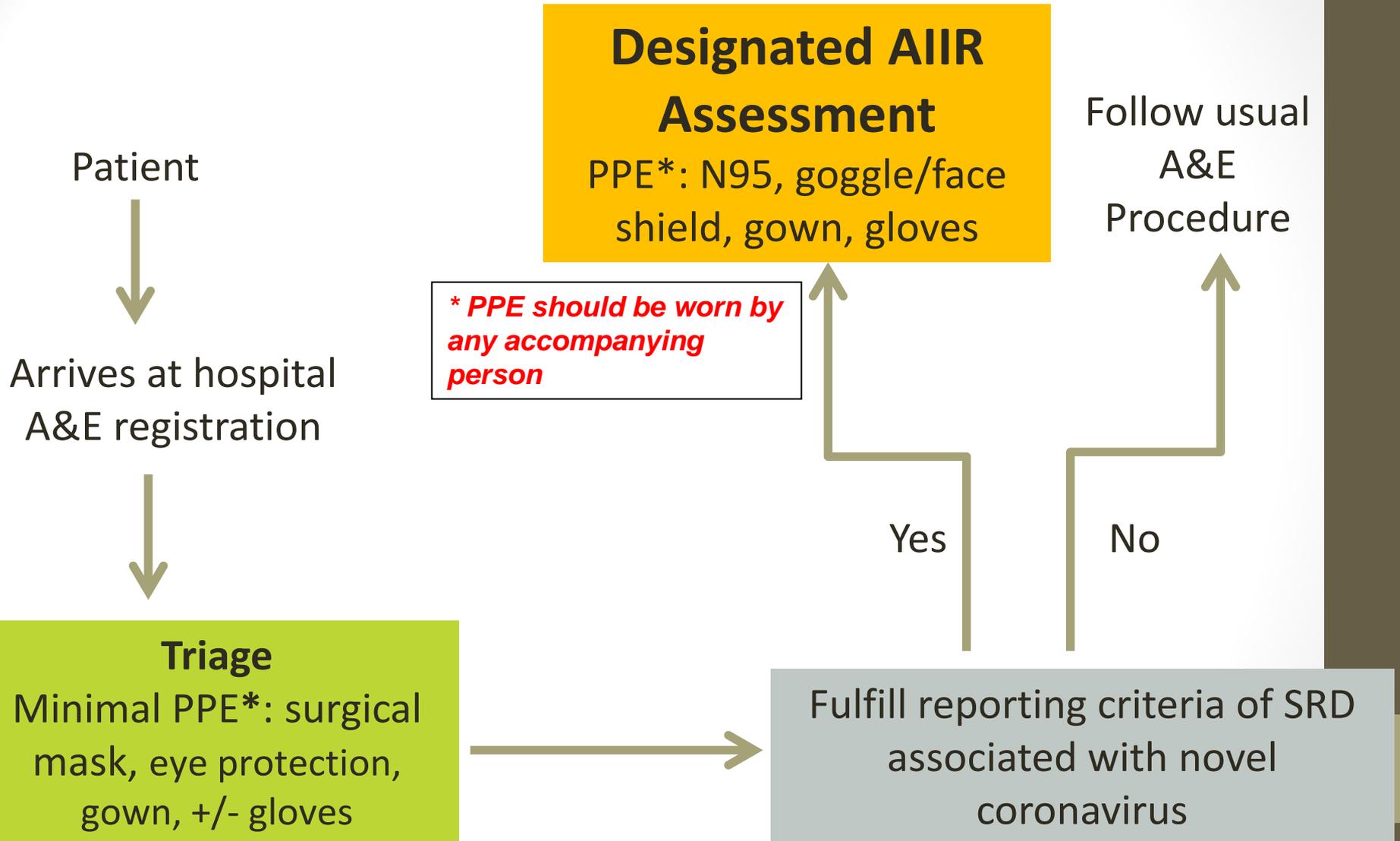
Patient triage and segregation of high risk patients at out-patient clinic and AED

High-risk patients defined as fulfilling the FTOCC criteria – Fever, Travel#, Occupational exposure, Contact history, and Clustering phenomenon

Triage and segregate high risk patients in separate waiting areas/consultation rooms and procedure areas as far as feasible, with following control measures:

- Physical separation
- Optimize air exchange by engineering control or local exhaust fan
- Surgical mask for all segregated patients
- Allow minimum number of accompanying person
- Minimize unnecessary patient movement

Flow for A&E Triage



** PPE requirement is considered as a protective measure based on the joint risk assessment
By CICO office, HA and ICB, CHP*

POSTER reminder to be posted at AED, SOPD and GOPC

病人及訪客請注意

Visitors and Patients Please Pay Attention

如出現呼吸道感染徵狀

If you have respiratory symptoms

- 請佩戴外科手術口罩
Wear surgical masks
- 通知醫護人員
Report to healthcare workers immediately

進入及離開前 徹底清潔雙手

Perform hand hygiene before and after visiting



保護自己·保障他人

Protect yourself and Other People

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

Inter-hospital transport arrangement

Patient	Service provider	Refer document below
<ul style="list-style-type: none">● Emergency inter-hospital patient transport● transport of patient with suspected or confirmed SRD associated with NOVEL CORONAVIRUS	Fire Services Department (FSD) Ambulance	HAHO Operations Circular No. 28/2009: Classification of Ambulance Calls for Emergency Inter-hospital Transfers by Fire Services Department (FSD) Ambulance
<ul style="list-style-type: none">● other patient transport	Non-Emergency Ambulatory Transfer Services	Infection Control Guideline for Non-Emergency Ambulatory Transfer Services (NEATS)

Visiting Policy

- “No visiting” to isolation wards unless on compassionate ground, e.g. paediatric patients. Registration is required and the number of visitors be kept to minimum and the risk of infection explained to the visitors
 - Advise visitors to comply with infection control precautions, correct use of PPE and hand hygiene
- In general,
 - Children under 12 are generally not permitted in patient care area unless with prior approval
 - Pregnant women are strongly discouraged from visiting the hospital.
 - People with signs and symptoms of influenza-like illness or other infectious diseases should not visit hospitals

Recommended visiting and volunteer service/clinical attachment policies in HA Hospital

HK Gov't Response Systems HA Response		Alert Response Level	Serious Response Level		Emergency Response Level
		Alert Response Level	Serious Response Level (S1)	Serious Response Level (S2)	Emergency Response Level
Items		Alert Response Level	Serious Response Level (S1)	Serious Response Level (S2)	Emergency Response Level
Visiting hours	Isolation wards	No visiting unless on compassionate ground			
	Other patient areas	Not more than 4 hrs per day, 2 persons at a time	Not more than 4 hrs per day, 2 persons at a time	2 hrs per day, 2 persons at a time	Subject to CHP's advice
	Convalescent hospitals	Not more than 6 hrs per day, 2 persons at a time	Not more than 6 hrs per day, 2 persons at a time	4 hrs per day, 2 persons at a time	
Hand Hygiene	Required	Required	Required	Required	
Surgical Masks	Not required	Not required	Required in visiting patient areas	Required in all areas	
Temperature check	Publicize the general public to take temperature check by themselves				Subject to CHP's advice
Registration	Registration is required for visiting suspected/confirmed AI case in isolation wards under special permission				Subject to CHP's advice
Volunteer Service & Clinical attachment	Isolation wards	Only allowed on a case-to-case basis	Only allowed on a case-to-case basis	Suspended	Suspended
	Other patient areas	Allowed	Allowed under directives given by Infection Control Team	Suspended	Suspended
	Non-patient areas and Non-hospital settings	Allowed	Allowed under directives given by Infection Control Team	Suspended	Suspended

Workplace reminder

SRD-Novel Coronavirus What a healthcare worker should know

Patient Triage

- Alert to patient presenting with respiratory symptoms
- Check epidemiological link
- Offer surgical masks to suspected patient and accompanying person
- Segregate in a negative pressure consultation room/ Airborne Infection Isolation room
- Give instructions on hand hygiene and cough etiquette

Patient Isolation and Precautions

- Isolate in an Airborne Infection Isolation Room
- Wear PPE, according to Contact, Droplet and Airborne Precautions
- Use dedicated equipment
- Arrange laboratory tests with clinical microbiologist

PPE for Aerosol-generating procedures (AGPs)

- Wear N95 respirator, eye protection, gown and gloves when performing AGPs, such as endotracheal intubation and cardiopulmonary resuscitation etc.

Reporting and Communication

- Report to hospital ICT
- Notify Central Notification Office through NDORS
- Call MCO of CHP and HODO of HA
- Inform receiving unit on patient transfer
- Communicate importance of isolation precautions to patient's family and visitors



醫院管理局
HOSPITAL
AUTHORITY

*For enquiries,
please contact hospital
Infection Control Team.*

Chief Infection Control Officer (CICO) Office
December 2012

Guidelines for healthcare professionals

- Home
- About Us
- Scientific Advisory Structure
- Risk Communication Advisory Group
- Health Topics
- Statistics
- Recommendations
- Publications
- Infection Control Corner
- Media Room
- Training and Events
- e-Resources
- Other Languages
- Related Links
- Contact Us

- General Public
- Health Professionals
- Institutions & Schools
- Business & Workplace

[Home](#) > [Feature topics](#)

5 October 2012

Health Professionals

 [Printer friendly](#)

- [Guidelines on MINIMAL Personal Protective Equipment Requirements for Severe Respiratory Disease Associated with Novel Coronavirus](#)
- [Recommended PPE for routine patient care and performing aerosol-generating procedures\(a\) in hospitals/clinics for suspected or confirmed novel coronavirus](#)
- [Interim Recommendations on Infection Control for Novel Coronavirus](#)

 [Go to top](#)



Department of Health

The Centre for Health Protection is a professional arm of the Department of Health for disease prevention and control

Interim Recommendations on Infection Control for Novel Coronavirus

ver. 3, 3 Oct 2012

Prepared by ICB, CHP

Interim Recommendations on Infection Control for Severe Respiratory Disease Associated with Novel Coronavirus

(ver. 3, 3 Oct 2012)

1. Preamble

This interim recommendation on infection control of novel coronavirus is prepared in light of the recent case reports from Saudi Arabia and UK. It will be reviewed regularly and updated as required when more scientific evidence on the virus and associated infections is available.

2. Isolation Precautions for Suspected and Confirmed Cases

In view of the severity of illness of reported cases and uncertainty on the transmissibility of the novel coronavirus, standard, contact and airborne precautions should be implemented for all suspected and confirmed cases. The measures include the following during patient care under isolation:

- Hand hygiene
- Personal protective equipment (PPE): N95 respirators, eye goggles, gown and gloves
- Isolate patient in a negative pressure single room or cohort those of the same cluster or with the same etiological diagnosis
- Special attention should be drawn when performing high-risk aerosol-generating procedures. It is important to put on eye or face protection and to wear N95 respirator. Procedures that belong to this category include endotracheal intubation, cardiopulmonary resuscitation, bronchoscopy, autopsy, surgery, open suctioning of respiratory tract (including tracheostomy care), non-invasive positive pressure ventilation (BiPAP & CPAP), high-frequency oscillatory ventilation, nebulizer therapy and sputum induction. Clinicians should carefully evaluate the indication and risk before applying these procedures. Meanwhile, NPA and high flow oxygen (6L/min) are theoretically at risk of dispersal of infectious respiratory droplets in high risk areas, these procedures should be performed in conditions as required for aerosol-generating procedures.

3. Other Infection Control Measures

- Handling of suspected case at triage station
Exercise standard, contact and airborne precautions with appropriate PPE included surgical mask, eye goggles, gown and gloves.
- Specimens Collection
Exercise standard, contact and airborne precautions for patients under isolation.

Recommended PPE for routine patient care and performing aerosol-generating procedures in hospitals/clinics for suspected or confirmed novel coronavirus

3 October 2012 (version 3)

Recommended PPE for routine patient care and performing aerosol-generating procedures(a) in hospitals/clinics for suspected or confirmed cases with Severe Respiratory Disease Associated with Novel Coronavirus

Apply standard precautions (SP) +/- transmission-based precautions for all patients.		
Areas		Recommended personal protective equipment (PPE)
Routine patient care	High -risk patient areas(b) for caring of suspected or confirmed novel coronavirus infection	N95 respirator(c) (Surgical mask could be an alternative for AED triage station base on nature of encounter upon risk assessment), eye protection(d), gown and gloves
	Other patient areas	SP +/- Transmission based precautions
Performing aerosol-generating procedures(a)	High -risk patient areas(b) for caring of suspected or confirmed novel coronavirus infection	N95 respirator, eye protection(d), gown, gloves and cap(e); Place patient in a negative pressure airborne infection isolation room (AIIR).
	Other patient areas	Surgical mask/ N95 respirator(c), eye protection(d), gown and gloves Perform all aerosol generating procedures in a well-ventilated area (e.g. mechanical ventilation with minimum of 6 air changes per hour (ACH) or use portable HEPA filter e.g. IQ Air if indicated).
No patient contact	High-risk patient areas(b) for suspected or confirmed novel coronavirus infection	Surgical mask
	Other patient areas	Surgical mask for signs and symptoms of respiratory infection
	Non-patient areas	Surgical mask for signs and symptoms of respiratory infection

Remarks:

- Aerosol-generating procedures with increase in risk of respiratory infection transmission are endotracheal intubation, cardiopulmonary resuscitation, bronchoscopy, open suctioning of respiratory tract (including tracheostomy care), autopsy and non-invasive positive pressure ventilation (BiPAP& CPAP), high-frequency oscillatory ventilation, nebulizer therapy and sputum induction (CDC,WHO, HPA/UK). Meanwhile, NPA and high flow oxygen (6L/min) are theoretically at risk of dispersal of infectious respiratory droplets in high risk areas, these procedures should be performed in conditions as required for aerosol-generating procedures (consensus from HA experts on IC).
- High-risk patient areas refer to triage stations of out-patient clinics, Accident & Emergency department (triage stations, resuscitation rooms, waiting areas/consultation rooms, and fever triage cubicles), and isolation wards for suspected or confirmed novel influenza patients.
- Based on transmission-based precautions and risk assessment.
- Eye protection refers to full face shield or goggles or eye-visors.
- Cap is optional

Prepared by
Infection Control Branch
Centre for Health Protection
3 October 2012 (version 3)

Guidelines on MINIMAL PPE Requirements for Severe Respiratory Disease Associated with Novel Coronavirus

Version 2 as at 26 September 2012

Infection Control Branch

Guidelines on MINIMAL Personal Protective Equipment Requirements for Severe Respiratory Disease Associated with Novel Coronavirus

執行新型冠狀病毒致嚴重呼吸系統病防控措施時所需基本個人防護裝備的指引

The recommendation is based on the current knowledge and would be revised if new information available

此建議是根據目前已知的資訊而定，內容會隨時更新

1. Selection of PPE should be based on risk assessment
應根據風險評估而選擇適當的個人防護裝備
2. Working cloth and working shoes should be worn before the operation
參予行動時應穿著工作服及工作鞋
3. Hand Hygiene is the most important measure to prevent spread of infections.
手部衛生是是最有效防止傳染病傳播的方法
4. Area outside of the infected building should be divided into “clean zone” and “dirty zone” that only surgical mask is required in the “clean zone”, such as commander post and press area; while N95 respirator, gloves, eye protection and gown are required in the “dirty zone”. Put on gloves before direct contact with contaminated items or suspected patients.
在受病毒感染的樓宇外，先劃分清潔區和污染區；在清潔區，如指揮站和記者區執行職務，只需戴外科口罩為基本裝備，在污染區執行職務則須穿上眼部防護裝備、N95 呼吸器和保護袍。在直接接觸污染物品或疑似病者前才穿著手套。
5. Shoe cover is not a good PPE as this material would be torn easily that slip may occur (occupational hazard).
鞋套並非理想個人防護裝備，使用時易穿破及引致滑倒（職業性危害）。
6. When performing aerosol-generating procedures, HCWs should apply Standard plus Contact plus Airborne Precautions. Examples identified by WHO include like intubation and related procedures (e.g. manual ventilation, suctioning), cardiopulmonary resuscitation, autopsy, surgery, and bronchoscopy. Procedures using high pressure water jet also fall under this category.
在進行產生霧化程序時，應採用標準預防措施再加接觸及空氣傳播隔離措施。世界衛生組織識別此類程序，例如插氣管導管和相關程序(人工換氣、吸痰)、心肺復蘇、驗屍和支氣管鏡檢查。使用高壓水槍也屬此類程序
7. Use Barrierman only if massive environmental contamination is anticipated. Under this circumstance, rubber boots may also be required.
Barrierman 保護衣並非為感染控制而設計，只應在預計有大量飛濺的環境下才使用全身保護衣，此情況下，需穿上水靴
8. Extreme cautions must be exercised in removing PPE process to avoid self contamination
卸除防護裝備時必須額外小心，避免在過程中受污染。

Action

1. Port-Health measures
2. Epidemiological investigation and control
3. Home confinement
4. Opening up of isolation Centre/ Quarantine Centre
5. Opening up treatment centre located in community
6. Isolation and evacuation of infected building
7. Disinfection of infected building
8. Others



**Recommendation on MINIMAL
PPE Requirements**

Guidelines on MINIMAL Personal Protective Equipment Requirements for Severe Respiratory Disease Associated with Novel Coronavirus

執行新型冠狀病毒致嚴重呼吸系統病防控措施時所需基本個人防護裝備的指引

The recommendation is based on the current knowledge and would be revised if new information available

此建議是根據目前已知的資訊而定，內容會隨時更新

1. **Selection of PPE should be based on risk assessment**

應根據風險評估而選擇適當的個人防護裝備

2. Working cloth and working shoes should be worn before the operation

參予行動時應穿著工作服及工作鞋

3. Hand Hygiene is the most important measure to prevent spread of infections.

手部衛生是最有效防止傳染病傳播的方法

4. **Area outside of the infected building should be divided into “clean zone” and “dirty zone” that only surgical mask is required in the “clean zone”, such as commander post and press area; while N95 respirator, gloves, eye protection and gown are required in the “dirty zone”. Put on gloves before direct contact with contaminated items or suspected patients.**

在受病毒感染的樓宇外，先劃分清潔區和污染區；在清潔區，如指揮站和記者區執行職務，只需戴外科口罩為基本裝備，在污染區執行職務則須穿上眼部防護裝備、N95呼吸器和保護袍。在直接接觸污染物品或疑似病者前才穿著手套。

5. **Shoe cover is not a good PPE as this material would be torn easily that slip may occur (occupational hazard).**

鞋套並非理想個人防護裝備，使用時易穿破及引致滑倒（職業性危害）。

6. When performing aerosol-generating procedures, HCWs should apply Standard plus Contact plus Airborne Precautions. Examples identified by WHO include like intubation and related procedures (e.g. manual ventilation, suctioning), cardiopulmonary resuscitation, autopsy, surgery, and bronchoscopy. **Procedures using high pressure water jet also fall under this category.**

在進行產生霧化程序時，應採用標準預防措施再加接觸及空氣傳播隔離措施。世界衛生組織識別此類程序，例如插氣管導管和相關程序(人工換氣、吸痰)、心肺復蘇、驗屍和支氣管鏡檢查。使用高壓水槍也屬此類程序

7. **Use Barrierman only if massive environmental contamination is anticipated. Under this circumstance, rubber boots may also be required.**

Barrierman 保護衣並非為感染控制而設計，只應在預計有大量飛濺的環境下才使用全身保護衣，此情況下，需穿上水靴

8. Extreme cautions must be exercised in removing PPE process to avoid self contamination

卸除防護裝備時必須額外小心，避免在過程中受污染。

	Action 行動	Respiratory Protection 呼吸系統防護		Gloves 手套	Eye Protection (Goggles/Face shield) 眼部防護 (眼罩/面罩)	Cap 頭套	Gown 保護袍
		Surgical Mask 外科口罩	N95 Respirator N95呼吸器				
1	Port-Health Measures 港口衛生措施						
	Border/ boundary controls 邊境/口岸監控 - Temperature, check /collection of Forms 量度/ 體溫/收回健康申報 表	✓					
	Border/ boundary controls 邊境/口岸監控 (medical post 醫療檢查站) General medical enquires一般醫療查詢 Contact with suspected patients 接觸疑似病者時	✓	✓	✓	✓	Only used for aerosol-generating procedures 進行霧化程序時 才使用	✓
	Special operations 特別行動 Contact with suspected patients on board of vessel/flight 需要登上船隻/飛機接觸疑似病者 時		✓	✓	✓	Only used for aerosol-generating procedures 進行霧化程序時 才使用	✓

	Action 行動	Respiratory Protection 呼吸系統防護		Gloves 手套	Eye Protection (Goggles/Face shield) 眼部防護 (眼罩/面罩)	Cap 頭套	Gown 保護袍
		Surgical Mask 外科口罩	N95 Respirator N95呼吸器				
2	Epidemiological investigation and control 流行病學調查及監控						
	Inspect/ visit suspected/confirmed patient's home 檢查／探訪疑似 / 確診病者的居所		✓	✓	✓	✓	✓
	◆ Transport specimens to PHLC with proper containers, etc. ◆ 利用適當容器等設備把樣本送往公共衛生檢測中心進行化驗			✓			
	Disinfect patient's home 為病者家居進行消毒		✓	✓	✓	✓	✓

- ◆ Follow the “Safety Guidelines on Transport of Clinical Specimens and Infectious Substances for Courier Team” issued by PHLC
參照公共衛生檢測中心發出的“運輸隊運送臨牀樣本及具傳染性物質的安全指引”

*Put on gloves before direct contact with contaminated items or suspected patients. 在直接接觸污染物品或疑似病者前才穿著手套

	Action 行動	Respiratory Protection 呼吸系統防護		Gloves 手套	Eye Protection (Goggles/Face shield) 眼部防護 (眼罩/面罩)	Cap 頭套	Gown 保護袍
		Surgical Mask 外科口罩	N95 Respirator N95呼吸器				
3	Home confinement 家居隔離						
	Visit home confinee 探訪家居隔離者 (進入被隔離者居所)		✓	*	✓		✓
	Transfer confinee to isolation centre (include ambulance) 把曾與病者接觸的人士 送往隔離中心 (包括救護車)		✓	*	✓		✓
	Checking compliance of home confinee e.g. by Police (outside confinee's home) 檢查被隔離者遵行相關規定的情況 (如警員在被隔離者居所以外範圍進行檢查)	✓					

*Put on gloves before direct contact with contaminated items or suspected patients. 在直接接觸污染物品或疑似病者前才穿著手套

Action 行動	Respiratory Protection 呼吸系統防護		Gloves 手套	Eye Protection (Goggles/Face shield) 眼部防護 (眼罩/面罩)	Cap 頭套	Gown 保護袍
	Surgical Mask 外科口罩	N95 Respirator N95呼吸器				
4 Opening up of isolation Centre / Quarantine Centre 啓用隔離中心/檢疫中心						
Outside medical post 在醫療檢查站以外範圍	✓					
Inside medical post 在醫療檢查站 範圍內 -General screening, e.g. temperature check, BP taking 一般檢查，如探熱、量血壓 - Taking Blood, throat swab 抽血、咽喉拭子 -Manage symptomatic / febrile cases 處理有徵狀/發燒的病患個案		✓	*	✓		✓
		✓	✓	✓		✓
		✓	✓	✓	Only used for aerosol-generating procedures 進行霧化程序時才 使用	✓

*Put on gloves before direct contact with contaminated items or suspected patients. 在直接接觸污染物品或疑似病者前才穿著手套

Action 行動	Respiratory Protection 呼吸系統防護		Gloves 手套	Eye Protection (Goggles/Face shield) 眼部防護 (眼罩/面罩)	Cap 頭套	Gown 保護袍
	Surgical Mask 外科口罩	N95 Respirator N95呼吸器				
5 Opening up treatment centre located in community 啓用位於社區的治療中心						
Inside consultation room or waiting area 在診症室或候診範圍內						
-Drug dispensary 派藥	✓					
-General screening 一般檢查		✓	✓	✓		✓
-Manage symptomatic/febrile cases 處理有徵狀/發燒的病患個案		✓	✓	✓	Only used for aerosol-generating procedures 進行霧化程序時才使用	✓
Outside consultation room (non-patient area) 在診症室外（沒有病人的區域）	✓					
Environmental cleansing within clinic area 在診所範圍內進行環境清潔		✓	✓	✓	✓	✓

*Put on gloves before direct contact with contaminated items or suspected patients. 在直接接觸污染物品或疑似病者前才穿著手套

Action 行動	Respiratory Protection 呼吸系統防護		Gloves 手套	Eye Protection (Goggles/Face shield) 眼部防護 (眼罩/面罩)	Cap 頭套	Gown 保護袍
	Surgical Mask 外科口罩	N95 Respirator N95呼吸器				
6 Isolation and evacuation of infected building 隔離及撤出受病毒感染的樓宇						
Duties inside building 在樓宇內執行職務		✓	✓	✓		✓
Duties outside building 在樓宇外 -in clean zone 清潔區執行職務	✓					
-in dirty zone 在樓宇外污染區執行職務		✓	*	✓		✓
Transfer of contacts to isolation centre 把曾與病者接觸的人士送往隔離 中心		✓	✓	✓		✓

*Put on gloves before direct contact with contaminated items or suspected patients. 在直接接觸污染物品或疑似病者前才穿著手套

Action 行動	Respiratory Protection 呼吸系統防護		Gloves 手套	Eye Protection (Goggles/Face shield) 眼部防護 (眼罩/面罩)	Cap 頭套	Gown 保護袍
	Surgical Mask 外科口罩	N95 Respirator N95呼吸器				
7	Disinfection of infected building 為受病毒感染的樓宇進行消毒					
Disinfection work 消毒工作		✓	✓	✓	✓	✓
Disinfection outside infected building, including manning Medical Post 在受病毒感染的樓宇外執行消毒工作職務，包括在醫療檢查站當值		✓	✓	✓	✓	✓

*Put on gloves before direct contact with contaminated items or suspected patients. 在直接接觸污染物品或疑似病者前才穿著手套

Action 行動	Respiratory Protection 呼吸系統防護		Gloves 手套	Eye Protection (Goggles/Face shield) 眼部防護 (眼罩/面罩)	Cap 頭套	Gown 保護袍
	Surgical Mask 外科口罩	N95 Respirator N95呼吸器				
8 Others 其他						
Intercept 'runaway patients' from hospitals (police/immigration officer) 阻截擅自離院的病人 (警務處及入境事務處人員)		✓	✓	✓		✓
Repair/maintenance of sewers in hospitals/clinics 為醫院/診所的污水渠進行維修保養		✓	✓	✓	✓	✓
Handling of 'feverish' individuals in community settings 在社區內處理發燒個案	✓					

*Put on gloves before direct contact with contaminated items or suspected patients. 在直接接觸污染物品或疑似病者前才穿著手套

Guidelines and Recommendations on Infection Control

For general public

http://www.chp.gov.hk/en/view_content/26533.html

Centre for Health Protection

HP Centre for Health Protection
Department of Health
The Government of the Hong Kong Special Administrative Region

GovHK 香港政府一站通 TEXT ONLY 繁體版 简体版

Home
About Us
Scientific Advisory Structure
Risk Communication Advisory Group
Health Topics
Statistics
Recommendations
Publications
Infection Control Corner
Media Room
Training and Events
e-Resources
Other Languages
Related Links
Contact Us

General Public | Health Professionals | Institutions & Schools | Business & Workplace

Home > Feature topics

26 September 2012

General public

[Guard against Severe Respiratory Disease Associated With](#)

[Use Mask Properly](#)

[The Use of Bleach](#)

[Guidelines for Hand Hygiene](#)

[Make Sure the Trap Is Not Dry](#)

[A Guide to Personal, Home and Environmental Hygiene: Key](#)

[Go to top](#)

2008 © | [Important Notices](#) | [Privacy Policy](#)

Department of Health

The Centre for Health Protection is a professional arm of the Department of Health for disease prevention and control

預防新型冠狀病毒 致嚴重呼吸系統病

Guard against Severe Respiratory Disease
associated with **Novel Coronavirus**



傳播途徑

- 主要經患者咳嗽、打噴嚏或說話時產生的飛沫

病徵

- 發燒、咳嗽和呼吸困難

Transmission

- Mainly through respiratory droplets when infected people cough, sneeze and talk

Clinical features

- Fever, cough and breathing difficulties

預防方法

個人衛生

- 保持雙手清潔
- 打噴嚏或咳嗽時應用紙巾掩著口鼻，將染污的紙巾妥善棄置
- 如出現呼吸道感染病徵，應佩戴口罩，並盡快求診

環境衛生

- 保持空氣流通
- 避免前往人多擠迫、空氣欠流通的地方

旅遊健康建議

如感到不適，例如出現發燒、喉嚨痛、肌肉疼痛或咳嗽，應佩戴口罩。

- 出發前：應延遲行程，直至痊癒
- 在海外：告知酒店工作人員或領隊，並立即求診
- 返港後：立即求診，並告知醫生近期到過的地方

Preventive measures

Personal hygiene

- Keep hands clean
- Cover nose and mouth while sneezing or coughing with tissue paper, and dispose of soiled tissue paper properly
- Wear surgical mask and seek medical advice promptly if respiratory symptoms develop

Environmental hygiene

- Maintain good ventilation
- Avoid visiting crowded places with poor ventilation

Travel health advice

If feeling unwell, such as having fever, sore throat, muscle pain or cough, put on a surgical mask.

- Before departure: Postpone your trip until recovery
- While overseas: Inform hotel staff or tour leader, and seek medical attention immediately
- After return: Seek medical attention immediately, and inform the doctor of recent travel history

www.chp.gov.hk



衛生署
Department of Health

Guidelines and Recommendations on Infection Control

For institutions / business

Hotel Industry – Special notes on serving guests originating from Severe Respiratory Disease associated with Novel Coronavirus - affected countries/areas (October 2012)

Hotel Industry –

Special notes on serving guests originating from Severe Respiratory Disease associated with Novel Coronavirus - affected countries/areas

A. ADVICE UPON CHECK-IN AT RECEPTION:

NOTE: Perform a brief check of the guests' travel history in the past ten days to ascertain travel history.

Countries reporting cases include Kingdom of Saudi Arabia and Qatar. Please visit the Centre for Health website (CHP) for an updated list of affected areas:

http://www.chp.gov.hk/en/view_content/26511.html

For guests with positive travel history:

1. Advise to observe good personal hygiene, especially on hand hygiene and proper cough manners (Please refer to Annex I & Annex II).
2. 70-80% alcoholic-based handrub should be provided to all guests in public areas.
3. If feeling unwell, they should stay in the room, wear a surgical mask and call the hotel operator at once for arrangement of medical consultation.
4. Guest(s) is/are advised not to take public transport if respiratory symptoms develop.
5. The hotel should make any arrangement deemed necessary to help prevent the spread of infection as advised by CHP.

Guests without positive travel history are also reminded to observe good personal hygiene.

B. HANDLING OF GUEST WITH RESPIRATORY SYMPTOM(S)

1. Advise the guest to seek medical care immediately.
2. Before the guest seeks medical care:
 - advise the guest to stay in his/her room and put on a mask, while grouping and relocating any other asymptomatic roommate(s) in another room.
 - advise other asymptomatic collaterals to stay in their rooms.
 - open the windows of the rooms for better ventilation if possible.
 - suspend any mass gathering or social activities in the hotel.
 - minimise contact between staff and the symptomatic guest, his / her roommates and collaterals as far as possible.
3. Staff should put on a surgical mask, disposable gown and gloves, and face shield if contact with the symptomatic guest, his/her family members or collaterals is required. Minimise the contact with symptomatic guests as far as practicable.
4. Hotel management should always keep a list of staff and residents who had stayed in

the hotel, dates of staying in the hotel (check-in and check-out dates), identification / passport number, age, sex, nationality, contact telephone number, for possible public health action in case the patient is confirmed to be suffering from Severe Respiratory Disease associated with Novel Coronavirus.

5. Environmental disinfection using 1 in 49 diluted household bleach (containing 5.25% sodium hypochlorite) should be carried out immediately for any potentially contaminated installations, equipment or traffic pathways used by the symptomatic guest, for example elevator control panels and the lobby. Responsible staff should put on a surgical mask, disposable gown and gloves, and face shield.

For details, please refer to Guidelines on Infection Control and Prevention on Hotel Industry:

http://www.chp.gov.hk/files/pdf/Infection%20Control%20Guideline%20in%20Hotel%20Industry%20FINAL_18Sep08_.pdf

We would like to draw your attention to Chapter 3 (page 23) on handling of sick guests and Chapter 5 on Outbreak of Communicable Diseases.

Centre for Health Protection
October 2012

Recommendations

- For possible public health action in case the patient is confirmed to be suffering from SRD associated with novel coronavirus, hotel management should always keep:
 - **A list of staff and residents** who had stayed in the hotel,
 - **Dates of staying** in the hotel (check-in and check-out dates),
 - **Identification** / passport number, age, sex, nationality and contact **telephone number**
- Upon check-in at reception
 - Perform a brief check of the guests' travel history in the past ten days to ascertain travel history

For guests with **positive** travel history:

1. Advise to observe good personal hygiene, especially on hand hygiene and proper cough manners .
2. 70-80% alcoholic-based handrub should be provided to all guests in public areas.
3. If **feeling unwell**, they should **stay in the room**, **wear a surgical mask** and call the hotel operator at once for arrangement of **medical consultation**.
4. Guest(s) is/are advised not to take public transport if respiratory symptoms develop.

Handling of **guest with respiratory symptoms**

- Advise the guest to **seek medical care immediately**
- Before the guest seeks medical care:
 - advise the guest to stay in his/her room and put on a mask, while grouping and relocating any other asymptomatic roommate(s) in another room.
 - advise other asymptomatic collaterals to stay in their rooms.
 - open the windows of the rooms for better ventilation if possible.
 - suspend any mass gathering or social activities in the hotel.
 - **minimise contact between staff and the symptomatic guest, his / her roommates and collaterals as far as possible.**

Handling of guest with respiratory symptoms

- Staff should put on a surgical mask, disposable gown and gloves, and face shield if contact with the symptomatic guest, his/her family members or collaterals is required. **Minimise the contact with symptomatic guests as far as practicable**
- Environmental disinfection using 1 in 49 diluted household bleach (containing 5.25% sodium hypochlorite) should be carried out immediately for any potentially contaminated installations, equipment or traffic pathways used by the symptomatic guest, for example elevator control panels and the lobby. Responsible staff should put on a surgical mask, disposable gown and gloves, and face shield.

Advice to School on Prevention of Severe Respiratory Disease Associated with Novel Coronavirus (28 September 2012) v4

Advice to School on Prevention of Severe Respiratory Disease Associated with Novel Coronavirus

The recommendation is based on the current knowledge and would be revised if new information is available.

On 23 September 2012, the World Health Organization (WHO) reported two confirmed cases of severe respiratory disease associated with novel coronavirus. One had travelled to the Kingdom of Saudi Arabia (KSA) and Qatar while the other was a Saudi national.

Coronaviruses are a large family of viruses which include viruses that cause the common cold and Severe Respiratory Syndrome (SARS). Given that this is a novel coronavirus, WHO is currently in the process of obtaining further information to determine the public health implications of these two confirmed cases.

Good personal hygiene including proper hand hygiene is an effective way to prevent infection. In view of the severity of illness of reported cases and uncertainty on the transmissibility of the novel coronavirus, the following actions are advised for schools to prevent severe respiratory disease associated with novel coronavirus :-

(a) Maintain good indoor ventilation

- Windows of classroom should be opened for better ventilation
- Switch on fans or exhaust fans to enhance air flow
- Keep air-conditioners well-maintained
- Clean the dust-filters of air-conditioners regularly

(b) Environmental cleansing and disinfection

- Keep classrooms, kitchens, canteens, toilets and bathrooms clean and hygienic. School management is advised to maintain good hygienic standard of the school premises through thorough cleansing and disinfection daily (please refer to Annex I for procedures of preparing / using diluted bleach).
- Clean and disinfect frequently touched surfaces, furniture, toys, commonly shared items and floor at least daily by using appropriate disinfectant. For non-metallic surface, disinfect with 1 part of 5.25% household bleach in 99 parts of water, wait until dry and then rinse with water. For metallic surface, disinfect with 70% alcohol.
- If places are contaminated by respiratory secretions, vomitus or excreta, use strong absorbent disposable towels to wipe them away. Then disinfect the surface and the neighbouring area with appropriate disinfectant. For non-metallic surface, disinfect with 1 part of 5.25% household bleach in 49 parts of water, leave for 15-30 minutes, and then rinse with water. For metallic surface, disinfect with 70% alcohol.

(c) Environmental support for hand hygiene practice

- Provide liquid soap and disposable paper towels or hand dryers at places where there are handwashing facilities, e.g. toilets, kitchens / pantries, laundries, art rooms as indicated.
- Provide alcohol-based handrub in places where handwashing facility is available. 70-80% alcohol-based handrub is effective for disinfection only when hands are not visibly soiled.
- Wash hands frequently, especially in the following situation:-
 - before handling food or eating;
 - after sneezing, coughing, cleaning the nose and going to toilet; and
 - after physical education lessons.

Staff should observe themselves and instruct the children to maintain respiratory hygiene practices in accordance to the following advice:-

- Do not spit.
- Cover both the nose and mouth with a handkerchief or tissue paper when coughing or sneezing.
- Wrap up sputum with tissue paper and discard it into garbage bins with lids or flush them away in the toilet.
- Wash hands immediately after contacting respiratory secretions or touching objects contaminated with respiratory secretions.
- Put on a surgical mask for those with respiratory infection symptoms.

Staff and children should seek prompt medical attention if they develop fever or respiratory infection symptoms. For management of sick children in schools, please refer to the Guidelines on Prevention of Communicable Diseases in Schools / Kindergartens / Kindergartens-cum-Child Care Centres / Child Care Centres.

For more information

Please visit the website of the Centre for Health Protection of the Department of Health at www.chp.gov.hk

Centre for Health Protection
28 September 2012 (V4)

Useful links



Centre for Health Protection
Department of Health
The Government of the Hong Kong Special Administrative Region

GovHK 香港政府一站通

SEARCH [] SITE MAP []

Font Sizes [A A A] RSS []

Home
About Us
Scientific Advisory Structure
Risk Communication Advisory Group
Health Topics
Statistics
Recommendations
Publications
Infection Control Corner
Media Room
Training and Events
e-Resources
Other Languages
Related Links
Contact Us

General Public | Health Professionals | Institutions & Schools | Business & Workplace

VIDEO

Dr Thomas Tsang : novel coronavirus not SARS (Chinese version only)
27 Sep 2012

Vaccination Subsidy Schemes 2012/13
26 Sep 2012

http://www.chp.gov.hk/en/index.html

Severe Respiratory Disease associated with Novel Coronavirus

[Influenza Page](#)

[Prevent Legionnaires' D](#)

PRESS RELEASES

[Suspected poisoning related](#)

Centre for Health Protection
Department of Health
The Government of the Hong Kong Special Administrative Region

GovHK 香港政府一站通

SEARCH [] SITE MAP []

Font Sizes [A A A] RSS []

Home > Feature topics

12 October 2012

Severe Respiratory Disease associated with Novel Coronavirus

[Factsheet](#)

[Affected Areas / Countries with Severe Respiratory Disease associated with Novel Coronavirus](#) Update

[Press Releases](#)

[Letters to Doctors](#)

[Letters to Chinese Medicine Practitioners](#) (Chinese version only)

[Letters to Institutions](#)

[Scientific Committee on Emerging and Zoonotic Diseases - Consensus Summary on Severe Respiratory Disease associated with Novel Coronavirus](#) (September 2012)

Guidelines

- [General Public](#)
- [Health Professionals](#)
- [Institutions & Schools](#)
- [Business & Workplace](#)

[Health Education Materials](#)

Printer friendly

Department of Health
The Centre for Health Protection is a professional arm of the Department of Health for disease prevention and control.

Internet: icidportal.ha.org.hk



HA Intranet: icidportal.home



The screenshot displays the ICID portal website. The top navigation bar includes 'Home', 'About us', 'IDCTC', 'IEC', 'IDC', 'CICO', 'CHP', and 'HA'. The main content area is titled 'Severe Respiratory Disease Associated With Novel Coronavirus'. It features three sections: 'IEC webpage on the novel coronavirus', 'CHP webpage on the novel coronavirus', and 'Publications on novel coronavirus'. The publications list includes several articles from Eurosurveillance, the New England Journal of Medicine, and other sources, covering topics like incubation periods, case definitions, and public health responses. A 'Training Kit' section is also visible, listing 'Slides' and 'Video'. The 'Slides' section includes a link to an 'HA infection control forum – SRD associated with novel coronavirus by CICO office (as of 3rd October 2012)'. The 'Video' section includes a link to a 'Hand Hygiene Technique' video, which is partially visible at the bottom of the page.

~END~