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LEGISLATIVE COUNCIL BRIEF

Prevention and Control of Disease Ordinance (Chapter 599)

PREVENTION AND CONTROL OF DISEASE ORDINANCE (AMENDMENT OF SCHEDULES 1 AND 2) NOTICE 2014

PREVENTION AND CONTROL OF DISEASE (AMENDMENT) REGULATION 2014

INTRODUCTION

On 17 February 2014, the Secretary for Food and Health, in exercise of powers conferred by section 7 of the Prevention and Control of Disease Ordinance (Cap. 599) ("the Ordinance"), made the Prevention and Control of Disease (Amendment) Regulation 2014 ("the Amendment Regulation"); the Director of Health ("the Director"), in exercise of powers conferred by section 15 of the Ordinance, made the Prevention and Control of Disease Ordinance (Amendment of Schedules 1 and 2) Notice 2014 ("the Notice"). The Notice and Amendment Regulation are at the **Annex**.

JUSTIFICATIONS

- 2. The Ordinance and its subsidiary legislation provide a legislative framework for the prevention and control of communicable diseases of public health importance. The Prevention and Control of Disease Regulation (Cap. 599A) ("the Regulation") provides for various disease control measures for infectious diseases.¹
- 3. Section 4 of the Regulation requires medical practitioners to notify the Director if they have reason to suspect the existence of a case of any of the infectious diseases specified in Schedule 1 to the Ordinance in a form as specified by the Director. The reporting of infectious diseases is an important element in the surveillance, prevention and control of spread of infectious diseases.

¹ Under the Ordinance –

^{• &}quot;infected" means the presence of an infectious agent on the surface of or inside the body of, or in, a human being or an article; and

^{• &}quot;infectious agent" means a parasite, a fungus, a bacterium, a virus, a prion or any other agent that can cause an infectious disease.

- 4. Section 43 of the Regulation requires persons in charge of a laboratory to notify the Director of leakage of any infectious agent specified in Schedule 2 to the Ordinance in the laboratory that may pose a public health risk. The reporting of such leakage is important to ensure laboratory safety and prevention of laboratory-acquired infections.
- 5. Section 56 of the Regulation defines specified diseases, which provides for section 57 empowering the prohibition of cases and contacts of a specified disease from leaving Hong Kong, and section 59 empowering the taking of body temperature of travellers at a point of entry.
- 6. The Director regularly reviews the list of infectious diseases statutorily notifiable by medical practitioners and the list of infectious agents, in order to ensure maximal protection against infectious diseases. In Schedule 1 to the Ordinance, there are 48 infectious diseases, including "Influenza A (H2), Variant Influenza A (H3N2), Influenza A (H5), Influenza A (H7), Influenza A (H9)", which are all subtypes of the influenza A virus. In Schedule 2 to the Ordinance, there are 32 infectious agents, including "Influenza virus type A (subtype H2, H5 and H7)". Specified diseases in Section 56 of the Regulation include "Influenza A (H2), Influenza A (H5), Influenza A (H7), Influenza A (H9) or Swine Influenza".

Seasonal influenza and Novel influenza A infection

- 7. Influenza viruses are classified into three main types, namely A, B, and C. Type A influenza viruses are further divided into subtypes according to the specific variety and combinations of two proteins that occur on the surface of the virus, the haemagglutinin or "H" protein and the neuraminidase or "N" protein. There are 18 known H-subtypes and 11 known N-subtypes of type A influenza viruses.
- 8. Some influenza A virus subtypes and Influenza B viruses circulate and cause seasonal influenza infection in humans. These viruses transmit between humans easily through droplets. The general population usually has some immunity against infections of these viruses through past infection or vaccination. The number of people who are suffering from seasonal influenza is huge and not every one of them will seek medical advice or receive laboratory testing. For healthy individuals, seasonal influenza is usually self-limiting with recovery in about 2 to 7 days. It is therefore not monitored as a statutorily notifiable disease. The surveillance of seasonal influenza is done through other means such as the sentinel surveillance system.
- 9. Apart from the influenza viruses which can circulate among humans and cause seasonal influenza, many other influenza A viruses are found in birds and other animal species. These animal viruses are distinct from human seasonal influenza viruses and do not easily transmit to humans. Some of these viruses may, however, occasionally infect humans, causing disease ranging from mild conjunctivitis to

severe pneumonia and even death. These are known as novel influenza viruses, against which the human population has low or no immunity. Examples of these are avian influenza A virus subtypes H5N1, H7N9, H9N2 and H10N8, and swine influenza A virus subtypes H1N1 and H3N2. There are also other subtypes of influenza A viruses, such as H1 and H3 subtypes, which originate from non-human species or from genetic re-assortment between animal and human viruses. Some influenza viruses have historically infected humans but are no longer circulating among humans. For example, Influenza A(H2N2) had once caused annual epidemics in the late 1950s. In 1968, the influenza A(H3N2) virus emerged and caused a pandemic between 1968 and 1969, while influenza A(H2N2) had stopped circulating in humans. Since persons born after 1968 have had not been exposed to and had minimal immunity against influenza A(H2N2), it is considered a novel influenza A virus.

- 10. Usually, human infections of novel influenza A viruses are acquired through direct contact with infected animals or contaminated environments. They do not usually spread very far among humans. However, if such a virus acquired the capacity to spread easily among people, either through adaptation or acquisition of certain genes from human viruses, a pandemic may occur.
- 11. Among the novel influenza A viruses, influenza A(H5N1) emerged in 1997 and has since caused over 600 human infections in more than 10 countries. In 2009, a strain of influenza A(H1N1) virus emerged, spread across the world and caused the 2009 H1N1 pandemic. This pandemic A(H1N1)2009 virus has since been widely circulating across the globe, and is now established in human populations as a seasonal influenza virus, now known as influenza A(H1N1)pdm09.
- 12. More recently, human infections of a new avian influenza A(H7N9) virus were first reported in Mainland China in March 2013. So far, more than 340 human cases have been laboratory confirmed in 14 Mainland provinces/municipalities, Hong Kong, Taiwan and Malaysia, of which more than 80 patients have died. In November 2013, a human infection of influenza A(H6N1) was unprecedentedly reported in Taiwan, which caused mild illness. In November 2013, January 2014 and February 2014 respectively, a sporadic case of influenza A(H10N8) infection was reported in the Mainland, of which two patients died and one was once in critical condition.
- 13. There is a sensitive laboratory surveillance system for influenza virus in Hong Kong. The Centre for Health Protection ("CHP") of the Department of Health conducts characterisation of all influenza virus isolates including antigenic and genetic analysis. Since 1997, 22 cases of influenza A(H5N1) and eight cases of influenza A(H9N2) were recorded in Hong Kong. For influenza A(H7N9), five imported sporadic human infections have been detected in Hong Kong so far. With frequent international travel, it is foreseen that more imported human cases of novel influenza A infections, such as influenza A(H6N1) or influenza A(H10N8) or other subtypes, may occur in Hong Kong. Given the potentially unpredictable behaviour

of influenza viruses and the fact that majority of the population has no immunity against these viruses, vigilance and close monitoring is needed for novel influenza A infection. Upon detection of any such cases, CHP will conduct epidemiological investigation, contact tracing and other necessary control measures, to ascertain and contain the extent of transmission of infection. CHP will also report all human infections with influenza viruses that do not belong to known seasonal influenza viruses to the World Health Organization, as required under the International Health Regulation (2005).

- 14. Currently, influenza A(H2), variant influenza A(H3N2), influenza A(H5), influenza A(H7) and influenza A(H9) are on the list of statutory notifiable diseases, but influenza A(H6N1) and influenza A(H10N8) are not. It would be inefficient and cumbersome to include specific subtypes of novel influenza A infections one by one to the list of statutorily notifiable diseases as they occur, which would cause potential delays to the aforementioned public health measures. Taking reference from the Centers for Disease Control and Prevention of the United States of America, we have used the name "Novel influenza A infection" to include all subtypes of novel influenza infections in humans, and this has replaced the relevant existing clauses in Schedule 1 to the Ordinance and Section 56 of the Regulation.
- 15. We have also added subtype H10 to the various influenza virus type A in Schedule 2 to the Ordinance. This is because human cases of influenza A(H10) infection detected so far resulted in severe infection. As such, this virus subtype is expected to pose a particular risk to laboratory workers, requiring enhanced laboratory containment to protect public health.

THE NOTICE AND AMENDMENT REGULATION

- 16. The Notice
 - (a) amends Schedule 1 to the Ordinance by repealing "Influenza A (H2), Variant Influenza A (H3N2), Influenza A (H5), Influenza A (H7), Influenza A (H9)" from the list of infectious diseases and replacing it by "Novel influenza A infection"; and
 - (b) amends Schedule 2 to the Ordinance by repealing "Influenza virus type A (subtype H2, H5 and H7)" from the list of infectious agents and replacing it by "Influenza virus type A (subtype H2, H5, H7 and H10)".
- 17. The Amendment Regulation amends Section 56 of the Regulation by repealing "Influenza A(H2), Influenza A(H5), Influenza A(H7), Influenza A(H9) or Swine Influenza" from the list of specified diseases and replacing it by "Novel influenza A infection".

18. The Notice and Amendment Regulation are gazetted on 21 February 2014 for commencement of operation on the same date.

LEGISLATIVE TIMETABLE

19. The legislative timetable is as follows –

Publication in the Gazette 21 February 2014

Tabling at Legislative Council 26 February 2014

IMPLICATIONS

20. The Notice and Amendment Regulation are in conformity with the Basic Law, including the provisions concerning human rights. The amendment will not affect the current binding effect of the Ordinance and have no economic, financial, civil service or family implications. It strengthens Hong Kong's capabilities in the prevention and control of disease and is in line with the sustainability principle of pursuing policies which promote and protect the health of the people of Hong Kong.

PUBLIC CONSULTATION

21. Members of the public, health professionals and the medical laboratory sector are expected to have no objection to the amendment.

PUBLICITY

22. The Department of Health issued a press release on 17 February 2014 regarding the Notice and Amendment Regulation. It has informed medical practitioners and the laboratory sector in Hong Kong of the changes in notification requirements. A spokesman from the Department of Health is available to answer media enquiries.

OTHERS

23. For any enquiries on this brief, please contact Dr S K CHUANG, Consultant Community Medicine (Communicable Disease), CHP (tel: 2125 2200).

Food and Health Bureau Department of Health February 2014

Annex

Prevention and Control of Disease (Amendment) Regulation 2014

(Made by the Secretary for Food and Health under section 7 of the Prevention and Control of Disease Ordinance (Cap. 599))

- 1. Prevention and Control of Disease Regulation amended The Prevention and Control of Disease Regulation (Cap. 599 sub. leg. A) is amended as set out in section 2.
- 2. Section 56 amended (specified diseases) Section 56, definition of specified disease—

Repeal paragraph (b)

Substitute

"(b) Novel influenza A infection; and".

Secretary for Food and Health

17 February

Explanatory Note

Prevention and Control of Disease (Amendment) Regulation 2014

The purpose of this Regulation is to replace "Influenza A (H2), Influenza A (H5), Influenza A (H7), Influenza A (H9) or Swine Influenza" in the list of specified diseases set out in section 56 of the Prevention and Control of Disease Regulation (Cap. 599 sub. leg. A) with "Novel influenza A infection" in order to include all subtypes of novel influenza infections in humans.

(Made by the Director of Health under section 15 of the Prevention and Control of Disease Ordinance (Cap. 599))

1. Prevention and Control of Disease Ordinance amended

The Prevention and Control of Disease Ordinance (Cap. 599) is amended as set out in sections 2 and 3.

2. Schedule 1 amended (scheduled infectious diseases)

(1) Schedule 1—

Repeal item 16.

(2) Schedule 1, after item 25—

Add

"25A. Novel influenza A infection (新型甲型流行性感冒)".

3. Schedule 2 amended (scheduled infectious agents)

Schedule 2---

Repeal item 11

Substitute

"11. Influenza virus type A (subtype H2, H5, H7 and H10) (甲型流行性感冒病毒(H2、H5、H7 及 H10 亞型))".

Prevention and Control of Disease Ordinance (Amendment of Schedules 1 and 2)

Notice 2014

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Director of Health

17 February 2014

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Prevention and Control of Disease Ordinance (Amendment of Schedules 1 and 2) Notice 2014

Explanatory Note Paragraph 1

3

Explanatory Note

The purposes of this Notice are—

- (a) to replace "Influenza A (H2), Variant Influenza A (H3N2), Influenza A (H5), Influenza A (H7), Influenza A (H9)" in the list of scheduled infectious diseases specified in Schedule 1 to the Prevention and Control of Disease Ordinance (Cap. 599) with "Novel influenza A infection" in order to include all subtypes of novel influenza infections in humans; and
- (b) to add "Influenza virus type A (subtype H10)" to the list of scheduled infectious agents specified in Schedule 2 to the Ordinance.