

Influenza - Statewide Standing Order for Supply of Anti-Influenza Prophylaxis to Defined Contacts

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Functional Sub group Population Health - Pharmaceutical
Population Health - Communicable Diseases

Summary The public health response for people exposed to influenza may include the urgent provision of prophylactic antiviral to the exposed person in settings including households, residential care facilities, hospitals and other workplaces. This statewide standing order sets out procedures for dispensing, supplying and administering the antivirals oseltamivir and zanamivir to defined community contacts of influenza, for the purpose of prophylaxis against influenza. This standing order, which is signed by the Chief Health Officer, has been developed with advice from the NSW Therapeutic Advisory Group and is to be reviewed annually.

Replaces Doc. No. Influenza - Standing Order for Mass Administration of Anti-Influenza Prophylaxis to Defined Contacts [PD2006_101]

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Applies to Area Health Services/Chief Executive Governed Statutory Health Corporation, NSW Dept of Health, Public Health Units, Public Hospitals

Audience Staff & Directors, Public Health Units, Pharmacy, Communicable Diseases, Health Promotion, Clinical

Distributed to Public Health System, NSW Department of Health, Public Health Units, Public Hospitals

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Status Active

Director-General

This Policy Directive may be varied, withdrawn or replaced at any time. Compliance with this directive is **mandatory** for NSW Health and is a condition of subsidy for public health organisations.

STATEWIDE STANDING ORDER FOR SUPPLY OF ANTI-INFLUENZA PROPHYLAXIS TO DEFINED COMMUNITY CONTACTS OF INFLUENZA PUBLIC HEALTH EMERGENCY RESPONSE

The public health response for people exposed to influenza in either infected animals or humans, or contaminated laboratory specimens from either animals or humans, carried out in accordance with the NSW Health *Notifiable Diseases Manual*, may include the urgent provision of anti-influenza prophylaxis to the exposed person. This standing order applies to people exposed to influenza in settings including households, residential care facilities, hospitals, laboratories, airports, poultry operations and processing plants, veterinary practices and other workplaces.

This standing order sets out procedures for dispensing, supplying¹ or administering the antivirals oseltamivir (Tamiflu®), and zanamivir (Relenza®) for the purpose of prophylaxis against influenza, and when the intensity of exposure is considered to warrant it. This standing order is a statewide policy with specific regard to influenza, and is mandatory² in those circumstances where the Chief Health Officer advises chief executives of public health organisations² to apply the standing order. This statewide standing order from the Chief Health Officer does not require authorisation by Area Health Service Drug Committees and when activated by the Chief Health Officer overrides any inconsistent local policy. **This standing order is to be reviewed annually by the NSW Therapeutic Advisory Group.**

Anti-influenza medications – oseltamivir and zanamivir

Two medications, oseltamivir and zanamivir, are suitable for use as prophylaxis against influenza. However, there are specific circumstances where one agent may be preferred over the other. Oseltamivir is available in capsule and oral suspension form, and is the preferred agent for use in most contacts due its ease of administration, greater supply and more extensive clinical use. Zanamivir is available as an inhaled powder, and is the preferred agent for use in patients with severe renal impairment (creatinine clearance <10mL/min). It may also be indicated where the circulating strain of influenza is resistant to oseltamivir but sensitive to zanamivir.

Oseltamivir is licensed for use for treatment and prophylaxis in adults and children 1 year or older, and zanamivir is licensed for use for treatment in adults and children 5 years and older, and prophylaxis in adults and children 5 years and older when the appropriate influenza vaccine is unavailable. Oseltamivir and zanamivir should be used with caution in pregnant or breast-feeding women, and only where the benefit is considered to outweigh the risk. There is limited experience with oseltamivir in children less than 1 year in age, as well as with zanamivir in children less than 5 years in age. This standing order does not include authorisation for administration or supply of oseltamivir to children under age of 1 or zanamivir to children under the age of 5. A decision to administer oseltamivir to children less than 1 year or zanamivir in children less than 5 years should be taken only where the benefit is considered to outweigh the risk, and should be prescribed by a paediatrician.

Use of the standing order

In order to fulfil this standing order, dispensing of oseltamivir and zanamivir will need to be arranged with a public hospital pharmacy, on behalf of the public health organisation, and at the request of the Public Health Unit Director, Medical Officer of Health, or delegate. The standing order authorises a registered nurse to administer and supply these antivirals to defined influenza contacts for the purpose of prophylaxis.

Administration or supply may be carried out during clinics specific for the purpose, or in other settings.

The Medical Officer of Health or delegate must be able to be contacted to provide advice to the registered nurse during the prophylaxis program. Prophylaxis should not be provided if more than seven days³ has elapsed since

¹ In this context supply means to provide to or for a specific patient and is consistent with the definition of supply in section 4 of the Poisons and Therapeutic Goods Act 1966. Administration is generally used to refer to the clinical situation of a health care worker providing a dose of medication to a patient in a clinical setting, and comes under the definition of supply.

² See section 7 of the Health Services Act 1997.

³ The incubation periods for pandemic and human swine influenza are currently unknown, but are assumed to be up to 7 days. Once further information on the epidemiological characteristics of any pandemic influenza virus, including the incubation period and infectious period, are known, the duration of time during which prophylaxis should be offered will be updated accordingly.

the last contact with a probable or confirmed case of influenza. Once it is determined that prophylaxis is required, administration or supply should commence as soon as possible. Where prophylaxis is commenced after the first exposure to influenza, the clinical condition of all contacts should be reviewed prior to administration or supply of prophylaxis. If the contact already has fever and/or other symptoms suggestive of infection with influenza, the contact should be considered for treatment as a case. Consult with the Medical Officer of Health or other medical officer in this instance, and refer the case to an appropriate facility for isolation and treatment if required.

At the completion of the prophylaxis program, the Medical Officer of Health or other medical officer must review and sign the program records as soon as possible to confirm that prophylaxis was administered in accordance with this statewide standing order.

Procedure checklist for a registered nurse to administer or supply anti-influenza medication to contacts of influenza

1. Arrange the supply of anti-influenza medication from the designated public hospital pharmacy department. The Public Health Director, Medical Officer of Health or delegated medical officer or registered nurse should advise the pharmacy of the drugs required, the estimated quantity and patients' details, if known.
2. Assess the eligibility for prophylaxis of each person exposed to influenza according to definitions of exposure where prophylaxis should be considered (listed in the table over leaf), ensure that fever or other symptoms of infection with influenza are not already present, and document that this has occurred. If fever or symptoms are present, contact the Medical Officer of Health or other designated medical officer immediately.
3. Explain the rationale and purpose of prophylaxis to each contact (or parent/guardian) and provide the appropriate NSW Health influenza fact sheets and treatment information. Document information provided.
4. Explain that prophylaxis does not exclude the possibility of a person developing influenza, and that the contact should watch closely for symptoms, and report the development of fever or other symptoms of influenza to their local public health unit.
5. Check with the contact (or parent/guardian) if they are pregnant, breast-feeding, have any known allergies or are currently taking any medications or have pre-existing medical conditions, such as renal impairment, asthma or chronic respiratory disease, and document that this has occurred.
6. Should the contact have a contraindication (hypersensitivity, fructose intolerance, haemodialysis or creatinine clearance <10 mL/min) or precaution (pregnant or breastfeeding, renal impairment, chronic respiratory disease) to antiviral treatments, **contact a medical officer to discuss how to proceed.**
7. Explain the side effects of the recommended anti-influenza medication and document that this has occurred.
8. Obtain valid consent from the contact (or parent/guardian), and document that this has been obtained.
9. Weigh the contact if indicated (e.g., for a child being administered oseltamivir).
10. Document for each contact the following details: name, address, phone number, date of birth, sex, weight (if a child), dosage and administration details, and the number of doses supplied.
11. For contacts with ongoing exposure, determine whether another week's supply of the anti-influenza medication will be necessary, and if so, document that this has been arranged.
12. Supply recommended medication, labelled with the drug name, drug frequency, and dose for that contact. If the contact's name was unknown by the pharmacist at the time he/she packaged and labelled the medication, the contact's name, DOB, and the date of supply must be written on the label at time of supply.
13. For contacts given zanamivir demonstrate how to load the diskhaler and describe how to inhale the medication. Observe the contact taking their first dose. Contacts who use bronchodilator inhalers (short acting beta-agonists) should do so prior to taking the dose of zanamivir.
14. At the completion of the treatment program, a medical officer must review, sign and date the records as soon as possible to confirm that the program was in accordance with the standing order. This can be done utilising the "Record of supply of anti-influenza prophylaxis to defined community contacts" form.
15. Administration or supply of prophylaxis should be ceased if subsequent laboratory testing indicates that the index case does not have influenza.
16. Contacts given a course of anti-influenza medications must be advised that they are to inform their general practitioner at their next visit.
17. All records relating to the administration of medication to contacts of influenza are to be held at the Public Health Unit in accordance with the policy on General Retention and Disposal of Patient/Client Records.

Please refer to the NSW Health *Notifiable Diseases Manual* for full management protocols, and *National Prescribing Service information* for full product information details.

Type of influenza	Definition of types of exposure where prophylaxis should be considered
NORMAL SEASONAL INFLUENZA	<p>Prophylaxis against normal seasonal influenza should be considered where an outbreak of influenza has been declared in a residential care facility¹ for:</p> <ul style="list-style-type: none"> • All residents irrespective of vaccination status • Health care worker contacts that have not been vaccinated against the currently circulating strain of influenza, and have been in unprotected contact with a case <p>Administration or supply of prophylaxis should be ceased if subsequent laboratory testing indicates that the index case does not have influenza.</p>
AVIAN INFLUENZA IN HUMANS	<p>Prophylaxis against avian influenza (AI) should be considered where the subject has been in unprotected contact within the last 7 days² (post-exposure prophylaxis) or will be in contact with (pre-exposure prophylaxis):</p> <ul style="list-style-type: none"> • a confirmed human case of avian influenza during the infectious period (i.e. one day before to 7 days after onset of AI illness (for children aged <13 years one day before to 14 days after onset of illness, and for children < 5 years one day before to 21 days after onset of illness)² • poultry, or with any dead birds where the cause of death is unknown, in an area known to have outbreaks of AI, or • laboratory samples from persons or animals suspected of having avian influenza. <p>Administration or supply of prophylaxis should be ceased if subsequent laboratory testing indicates that the index case does not have influenza.</p>
PANDEMIC INFLUENZA	<p>Note: The case definition will be reviewed and revised as information about any future pandemic influenza strain becomes available. The information below is based on that of avian influenza.</p> <p>Prophylaxis against pandemic influenza (PI) should be considered where the subject has been in unprotected contact within the last 7 days² (post-exposure prophylaxis) or is likely to be in contact with (pre-exposure prophylaxis):</p> <ul style="list-style-type: none"> • a confirmed human case of pandemic influenza during the infectious period (i.e. one day before to 7 days after onset of influenza illness (for children aged <13 years one day before to 14 days after onset of illness, and for children < 5 years one day before to 21 days after onset of illness),² or • a person with an undiagnosed influenza-like illness in an area known to have outbreaks of pandemic influenza, or • laboratory samples from persons suspected of having pandemic influenza. <p>Administration or supply of prophylaxis should be ceased if subsequent laboratory testing indicates that the index case does not have influenza.</p>
HUMAN SWINE INFLUENZA	<p>Note: At the time of writing recommendations for contacts of human swine influenza are under review. The Chief Health Officer may order prophylaxis for different circumstances of exposure based on the latest recommendations from the Communicable Diseases Network of Australia.</p> <p>Prophylaxis against human swine influenza should be considered where the subject has been in unprotected contact within the last 7 days² with:</p> <ul style="list-style-type: none"> • a probable or confirmed human case of swine influenza during the infectious period (i.e. one day before to 7 days after onset of influenza illness²) or • laboratory samples from persons with probable or confirmed swine influenza <p>Administration or supply of prophylaxis should be ceased if subsequent laboratory testing indicates that the index case does not have influenza.</p>

1. As per the Communicable Diseases Network Australia, July 2008 *A Practical Guide for the Management of Influenza Outbreaks in Residential Care Facilities in Australia*, declaration of an influenza outbreak in a residential care facility (RCF) requires: three or more cases of newly-acquired respiratory illness in staff and / or residents of a facility within a period of 72 hours, characterised by fever > 38°C; PLUS one or more respiratory symptom: cough, shortness of breath, coryza (runny nose), sore throat; PLUS one or more systemic symptom: fatigue (severe tiredness), myalgia (muscle ache), rigors (chills), or headache.
2. The incubation periods for AI, pandemic and human swine influenza are currently unknown, but are assumed to be up to 7 days. Once further information on the epidemiological characteristics of any pandemic influenza virus, including the incubation period and infectious period, are known, the duration of time during which prophylaxis should be offered will be updated accordingly.

Standing order for antiviral prophylaxis of defined contacts of influenza

Oseltamivir (TAMIFLU®)

Zanamivir (RELENZA®)

(where vaccine unavailable)

	Oseltamivir (TAMIFLU®)	Zanamivir (RELENZA®) (where vaccine unavailable)
Age criteria	Adults, and children aged one year or older.	Adults, and children aged 5 years or older
Presentation	75 mg capsule; 12mg/ml powder for oral suspension (reconstitute with 52 mL water).	5 mg powder in blisters in Rotadisks. Four blisters in each Rotadisk ¹
Pre- or post-exposure prophylaxis dose	<p>For adults, adolescents ≥ 13 years and children > 40kg: 75 mg orally once daily, continued for 10 days after the last possible exposure.² (Reduce the dose to 75 mg second daily in patients with a creatinine clearance of 10-30 mL/min.)</p> <p>For children ≥ 1 year – 12 years: ≤ 15kg: 30mg daily (2.5 ml) >15 to 23 kg: 45 mg daily (3.75 ml) >23 to 40 kg: 60 mg daily (5 ml)</p> <p>for 10 days after the last possible exposure.²</p>	<p>10 mg (two blisters) inhaled once daily for 10 days after the last possible exposure.² Remove blue cover from diskhaler. Slide white tray out and pull out of diskhaler body. Drop foil Rotadisk into tray, smooth side up. Slide white tray back into diskhaler. Hold the diskhaler level and lift the flap up to puncture one medication blister. The contact should then exhale, close lips around mouthpiece and breath in steadily. Hold the breath for a few seconds and slowly breathe out. To advance to the next blister pull the white tray partially out, and click back to the holder. Lift the flap again and repeat inhalation.</p>
Contraindications	History of hypersensitivity to oseltamivir or zanamivir, fructose intolerance (oral suspension), subjects undergoing routine haemodialysis or continuous peritoneal dialysis, or those with a creatinine clearance <10 mL/min.	History of hypersensitivity to zanamivir, oseltamivir or lactose.
Precautions	Use with caution in pregnant or breastfeeding women, and subjects with chronic renal impairment, and only if the potential benefit justifies the potential risk.	Use with caution in pregnant or breast-feeding women, and subjects with severe asthma or chronic respiratory disease, and only if the potential benefit justifies the risk.
Drug Interactions	No significant interactions known.	No significant interactions known.
Side Effects	Nausea and vomiting (in approximately 10%), insomnia, headache, fatigue.	Gastro-intestinal upset, dizziness, bronchospasm (rare) and decline in respiratory function (rare).
Administration	As a result of reported gastrointestinal upset, oseltamivir should be taken with food. Gastrointestinal upset is most often associated with the first dose.	Subjects with asthma should use their bronchodilator inhaler prior to taking zanamivir. If new onset wheeze develops after taking zanamivir, discontinue therapy.
Communication and consent	Obtain consent, explain side effects and provide all relevant NSW Health fact sheets to subject and/or parent/guardian.	Obtain consent, explain side effects and provide all relevant NSW Health fact sheets to subject and/or parent/guardian.

- Each Rotadisk is inserted into a Diskhaler® device that punctures the disc and releases the powder, which is then inhaled. An online video demonstration is available at: <http://www.relenza.com/how-to-use-diskhaler.jsp?languages=English>
- Prophylaxis against influenza can be continued using oseltamivir for up to 42 days (six weeks), and using zanamivir for up to 28 days (4 weeks), if the exposure to influenza is ongoing.
- Both agents are classified as Category B1: Drugs which have been taken by only a limited number of pregnant women and women of childbearing age, without an increase in the frequency of malformation or other direct or indirect harmful effects on the human foetus having been observed. Studies in animals have not shown evidence of an increased occurrence of foetal damage.

Record of supply of anti-influenza prophylaxis to defined community contacts of influenza according to standing orders

Indicate type of influenza: Seasonal/Avian/ Pandemic/Swine

Date & Time	Name	Address	Phone	DOB	Sex	Weight kg	Fever or other symptoms present?*	Precautions or contraindications present?*	Side effects explained?	Consent obtained?	Fact sheets given?	Name of medication	Dose, frequency & no. of doses supplied	Name of authorised RN
Date: Time:							<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Oseltamivir <input type="checkbox"/> Zanamivir		
Date: Time:							<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Oseltamivir <input type="checkbox"/> Zanamivir		
Date: Time:							<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Oseltamivir <input type="checkbox"/> Zanamivir		
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Notes:

Medical Officer Signature:.....Print Name:..... Date:.....

***If yes, discuss with Medical Officer before supplying anti-influenza medication, as to whether patient requires further clinical care or assessment**