# LRI Children's Hospital

## Treatment of Children and Young People with Influenza like illness

| | |
|---|---|
| Staff relevant to: | Children's Hospital Staff |
| Team approval date: | January 2023 |
| Version: | 5 |
| Revision due: | January 2026 |
| Written by:<br>Reviewed by: | Ruth Radcliffe, Srini Bandi, Julian Tang<br>Ruth Radcliffe, Damian Roland |
| Trust Ref: | D10/2020 |

**Contents**

## 1. Introduction and Who Guideline applies to

The Guideline applies to all children presenting to the Children's Hospital with a flu like illness, excluding those with Malignancies (please contact the on call oncology team for advice in these patients).

Influenza is a viral respiratory tract infection that ranges in severity from mild to potentially fatal. Most healthy children with mild illness do not require treatment, but those with co-morbid conditions are at higher risk of a severe illness course. This guideline is to facilitate decision making on when to prescribe oseltamivir or other antivirals in children presenting with Influenza like illness.

**Related documents:**

Bronchiolitis UHL Childrens Guideline Trust Ref – B23/2017

Pertussis (Whooping Cough) UHL Childrens Medical Guideline Trust Ref – C14/2017

Respiratory Viral Illness (Including Flu) Infection Prevention UHL Childrens Guideline Trust Ref - D10/2019

## 2. Guideline Standards and Procedures

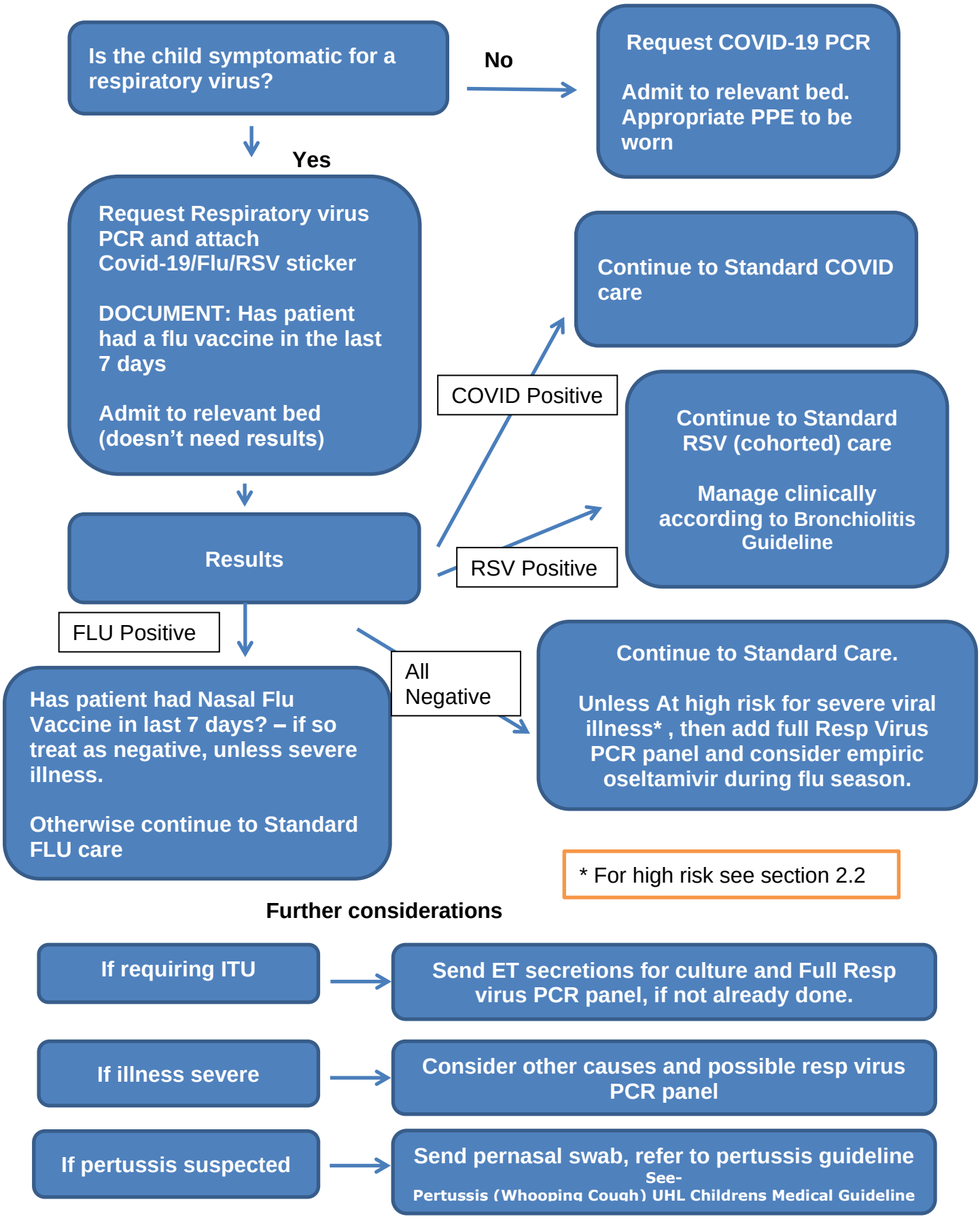
### 2.1 Patients admitted from Single Front Door

The algorithm on the following page can guide prescribing oseltamivir in Influenza like illness in children and young people admitted to hospital. Treatment decisions should be influenced by the likelihood of influenza infection with knowledge of current circulating respiratory viruses in the community. This guideline may need to be updated during the current flu season depending on predominant circulating strain and emergence of epidemics or pandemics. The algorithm also directs respiratory virus testing for those admitted with respiratory illnesses.

'Complicated' influenza (requiring oseltamivir) has been described here according to severity of illness, and not just by virtue of hospital admission. Oseltamivir for suspected flu can be used whenever it is felt to be clinically indicated, as a consultant decision.

**Please contact Virology/Microbiology to discuss treatment of patients with severe immunosuppression (see definitions on page 5)**

# Children's Hospital Respiratory virus testing for Winter season (For those admitted with respiratory illness)




## Further considerations






Title: Influenza like illness in Children and Young People
V:5 Trust Ref: D10/2020 Approved by UHL Children's Quality & Safety Board: January 2023 Next Review: January 2026
NB: Paper copies of this document may not be most recent version. The definitive version is held on InSite in the Policies and Guidelines Library

**Guidance on prescribing Oseltamivir for admitted patients with Influenza.**

Treat patients at risk of serious illness (See section 2.2) or requiring HDU level care or above with Oseltamivir (See section 2.4) if within 48 hours of symptom onset.

In severe illness antiviral treatment can be commenced even if > 48 hours since symptom onset.

Please note that children co-infected with a flu virus and another virus (e.g. RSV, hMPV) tend to have a more serious illness. Consider treating these patients with oseltamivir.

**2.2 At Risk Groups for severe influenza:**

a. Neurological, hepatic, renal, pulmonary and chronic cardiac disease.

b. Diabetes mellitus.

c. Severe immunosuppression *. **Seek Virology/Microbiology advice about treatment**

d. Children under 6 months of age.

***Severe immunosuppression:**

Examples of severe immunosuppression relevant to this guidance are given below. Degrees of immunosuppression are difficult to quantify and individual variation exists, therefore this list is not comprehensive.

a) Severe primary immunodeficiency.
b) Current or recent (within six months) chemotherapy or radiotherapy for malignancy.
c) Solid organ transplant recipients on immunosuppressive therapy.
d) Bone marrow transplant recipients currently receiving immunosuppressive treatment, or within 12 months of receiving immunosuppression.
e) Patients with current graft-versus-host disease.
f) Patients currently receiving high dose systemic corticosteroids (equivalent to ≥40 mg prednisolone per day for >1 week in an adult, or ≥ 2mg/kg/day for ≥1 week in a child), and for at least three months after treatment has stopped.
g) HIV infected patients with severe immunosuppression (CD4<200/µl or <15% of total lymphocytes in an adult or child over five; CD4< 500/µl or <15% of total lymphocytes in a child aged one to five; expert clinical opinion in a child aged under one).
h) Patients currently or recently (within six months) on other types of highly immunosuppressive therapy or where the patient's specialist regards them as severely immunosuppressed.

### 2.3 Patients being discharged from Single Front Door

No swabs should be routinely sent.

Children not at risk for severe viral illness should not routinely receive oseltamivir.

**For children at risk of severe influenza**:

If during flu season when the Heath Security Agency has advised that flu is circulating and empirical treatment should be considered ('flu threshold' has been reached, this is usually Jan-March but can start in Dec)

**AND** the child meets the following criteria

- Flu like illness for <48hrs?
- Fever >38 C and 2 or more of:
    - Cough
    - Sore throat
    - Coryza
    - Joint/limb pain
    - Headache
    - LRTI

Then empirical oseltamivir should be prescribed.

### 2.4 Prescribing Oseltamivir

Drug doses for oseltamivir should be taken from the BNFc –
Suspension is reserved for those patients under 1 year of age – If a patient cannot swallow the capsules then the capsules are to be opened and the powder given in water or on yoghurt.

Be aware that oseltamivir resistance may occur. Consider if poor response to treatment and/or H1N1 strain, especially in immunodeficiency. Treatment with Zanamivir may be recommended. Discuss with virology.

All children should be assessed for bacterial infection and treated accordingly.

### 2.5 Point of Care (POC) and Lab Testing

POC testing is currently suspended due to the risk of aerosol generation during the Covid-19 pandemic. Please refer to flow chart for testing pathway.

Please be aware that false negative results can occur with the initial RSV/FluA/B testing and in cases of clinical suspicion of Influenza in an 'at risk' or sick child, empirical treatment with oseltamivir should be commenced whilst awaiting full viral PCR panel. Oseltamivir can be stopped if Influenza infection is ruled out.

### 2.6 Isolation Requirements

Please see Infection Prevention Guideline. Respiratory Viral Illness (Including Flu) Infection Prevention UHL Childrens Guideline

### 3. Education and Training

Posters in clinical areas illustrating testing pathway.

### 4. Monitoring Compliance

| What will be measured to monitor compliance | How will compliance be monitored | Monitoring Lead | Frequency | Reporting arrangements |
|---|---|---|---|---|
| Correct prescribing of oseltamivir | Case note audit. | Radcliffe/Bandi | Every 2 years | Departmental audit meeting |

### 5. Supporting References


British National Formulary for Children (BNFc)

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/648758/PHE_guidance_antivirals_influenza_201718_FINAL.pdf

https://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/ucm107840.htm

https://www.cdc.gov/flu/children/antiviral.htm

Bueno M et al. Oseltamivir treatment for influenza in hospitalized children without underlying diseases. Pediatr Infect Dis J. 2013 Oct;32(10):1066-9


### 6. Key Words

Influenza, Children, Young People, Oseltamivir, Viral, Respiratory tract infection.

---

**The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.**
**As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.**

| Contact & review details | |
|---|---|
| **Guideline Lead (Name and Title)**<br>Ruth Radcliffe - Consultant<br>Srini Bandi – Consultant HoS<br>Julian Tang - Consultant | **Executive Lead**<br>Chief Medical Officer |
| **Details of Changes made during review**<br>Slight text amendments | |

**Appendix 1**

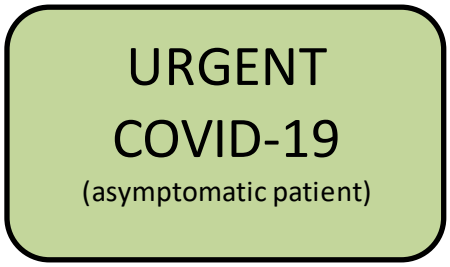
**Requesting Covid-19 only or FluA&B/RSV/Covid (Quad) test for patients being admitted**
**N.B. Only if indicated by algorithm**

**1. A single sample can be used.**

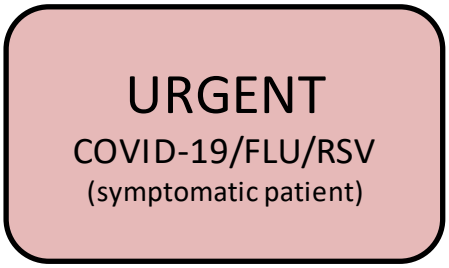
**2. Request on ICE:**

For symptomatic patients, request 'Respiratory Virus PCR' which can be found on the UHL PCR test side bar tab within the Micro/Virology tab.
For asymptomatic patients, request 'COVID-19 PCR'

**3. Attach the relevant stickers**




**OR**




Each sticker should be placed both on the bag and on the print out sheet (I.e. 2 stickers in total). Place the sheet in the pocket outside of the specimen bag, folded so that the stickers are clearly visible. Do not place in the bag with the specimen. Place the bag in the box with the COVID swab, so that it can be transferred to the lab promptly.

**4. On transfer to the lab, sample to be placed in grey bin outside Microbiology lab on Level 5 Sandringham**

**5. Results will be reported to ICE.**