Royal Hospital for Children Emergency Department

WN-CoV Patient pathway 2020

Case Definition

1. Positive travel history –The patient must have travelled to a risk area in the last 14 days before symptom onset
   OR
   Contact with confirmed case of WN-CoV

   AND

2. Respiratory symptoms:
   Unwell enough requiring admission to hospital with severe acute respiratory infection
   OR
   Acute respiratory infection of any degree of severity (including at least one of: shortness of breath, cough or sore throat)

An assessment for avian influenza risk factors should also be carried out for every individual that has travelled to China in the 10 days prior to onset of fever and lower respiratory tract symptoms

**ED reception staff**

- Reception staff to ask patients if they have been to one of the “WN-CoV POTENTIAL” areas in the last 14 days.
  - WN-CoV potential areas:
    - Wuhan City

- If there is a positive travel history to any of the above areas in that time frame reception staff to ask patient to wait in the breast feeding room across from the reception desk for the triage nurse

**Positive travel history** – The patient must have been in a “WN-CoV potential” area in the last 14 days before symptom onset OR contact with a confirmed case of WN-CoV AND have respiratory symptoms.

- Reception staff to inform triage nurse and ED nurse coordinator immediately
- Reception staff to take screen shot identifying list of patients in the ED waiting room and in triage queue
- Breast feeding room to be source cleaned in PPE and discuss with infection control before using again
ED Triage Nurse

- Triage nurse to go to the breast feeding room to confirm that child has respiratory symptoms and give the patient and relative/s a FFP3 face mask and take patient/s directly through to CDU Room 18 to gather further information
- **DO NOT USE CDU ROOM 17** (positive pressure room)
- Consider clearing the waiting room if the patient will not tolerate a FFP3 mask
- **Information gathering should not be done in the breast feeding room or in triage** to minimize contamination of rooms and to allow more time to gather the information in a safe and private room
- If child appears unwell, take the child straight through to the resuscitation room space 4
- Triage nurse to wear appropriate PPE (FFP3/Goggles/gloves/theatre gown) to assess child
  - **Positive travel history** – The patient must have been in a “WN-CoV potential” area in the last 14 days before symptom onset OR contact with a confirmed case of WN-CoV AND have respiratory symptoms
Resuscitation room

- Patients arriving by ambulance should be asked a brief travel history and shown the map and list of the “WN-CoV potential” areas
- Positive travel history – The patient must have been in a “WN-CoV potential” area in the last 14 days before symptom onset OR contact with a confirmed case of WN-CoV AND have respiratory symptoms
- These potentially unwell WN-CoV patients do NOT go to CDU and are managed in the Resuscitation room
- Child should be placed at one end of the resuscitation room and the automatic door on that end is sealed with barriers to allow a single point of access
- Please use space 4. If space 4 is being used, please lock the store room door from the other side to prevent contamination of store room
- All staff in direct contact with the child MUST wear appropriate PPE (FFP3/Goggles/gloves/theatre gown)
- Robing and derobing will take place in designated areas of the resus corridor
- Point of care virus testing should not be used
Intubation and Transfer

- All staff in direct contact with the patient must wear appropriate PPE
- Intubation of a potential WN-CoV child should be done in the Resuscitation room
- Intubation to be done with a cuffed endotracheal tube and an extra INTERSURGICAL filter should be placed on the patient end. (See picture 1)
- Transfer to PICU- The oxylog ventilator is not a closed circuit so it has been agreed that it should NOT be used for transfer. The child should have an extra INTERSURGICAL filter on the patient end and be bagged up to PICU (See picture 2)
- Transfer – corridor to closest lift. No significant risk to people in corridor unless in close contact with patient.
- PICU cubicle 5 is negative pressure

Picture 1
Medical Assessment of patient in CDU pressure room

- Initial medical assessment of potential WN-CoV patients should be done by an ED doctor and ED nurse
- Medical staff assessing patient wears appropriate PPE and carries a radio walkie talkie or dect phone when assessing patient to allow communication with staff outside the room
- Those in PPE should be in communication with a member of staff outside at all times
- Medical staff to contact Infectious Diseases (ID) and Infection Control (IC) team as soon as possible for advice
- If the child is unwell, move the child through to the resuscitation room
- If the child requires admission, the ED doctor will refer the patient to the CDU doctor for further management
- Point of care virus testing should not be used
- If the child is well enough to be sent home, testing as per HPS guidelines should still be done—see link/flow chart below
  - Advice should be given re home quarantine until advised otherwise by public health
  - Obtain a telephone number for public health to contact parents
  - Suspected cases of WN-CoV should not travel on public transport, including taxis
**Use of the CDU pressure room for WN-CoV**

- Keep staff entry into the room to a minimum
- Two nurses should be allocated to look after the patient
- PPE should be donned in the corridor
- Close each door after patient goes through into room 18
  - Ensure both doors are never open at the same time
- **DO NOT USE CDU ROOM 17** (positive pressure room)
- Supplies/equipment are available in store room in CDU (right side across from reception desk) including:
  - Supplies of FFP3 respirators
  - Gloves - disposable and latex-free alternatives, e.g. nitrile
  - Gowns/Aprons - disposable fluid-resistant full-sleeve gowns and single-use plastic aprons
  - Eye protection e.g. tight-fitting goggles or face shield - disposable, or if non-disposable, with a wipe able surface - not with elastic straps
  - Leak-proof, clinical waste disposal bags and yellow waste bin
  - Hand hygiene supplies
  - General-purpose detergent and disinfectant solutions
- Move supply/equipment trolley from store room to the corridor outside room 18
- 2 large yellow waste bins are required - One should be placed in the negative pressure room (inside room through both doors) and another between inner and outer doors for contaminated PPE
- De-robing should take place between inner and outer doors of negative pressure room and contaminated PPE should be placed in the yellow waste bin.
- Dedicated stethoscope, other medical equipment and dect phone/walkie talkie should be cleaned and left in the de-robing area

**Lab Requests**

- See flow chart below for sampling requirements
- Please discuss with Infectious Diseases (ID) and virology lab before taking and sending specimens.

**Transport of specimens**

- Please contact virology lab before transporting specimens
- Category B Transportation packaging
- Place samples into packaging in the patient’s room
- Request forms available here under PHE request forms
Parents/ Adult in attendance with child

- Parents of patients should be advised of the risk to them and if well should be given PPE
- Unwell adult/parent should be assessed for symptoms and remain in CDU negative pressure room (Adult ED have no negative pressure rooms)
- ED doctor to contact Adult ED to discuss management of unwell adult
- If a symptomatic child attends QEUH with their parent and is in a room there a RHC ED doctor should attend QEUH ED to assess the child there

PPE training and stock

- Each department is responsible for their own staff training
- Discuss with ED if training needed
- ED responsible for PPE stock in store room in both ED and CDU

Reporting

- Any case meeting the WN-CoV possible case definition must be reported to the local Health Protection Team.
- WN-CoV is notifiable under the Public Health (Scotland) Act 2008

Room cleaning

- Rooms used should have a terminal clean and be discussed with infection control before being used again
List of RHC Contact numbers

<table>
<thead>
<tr>
<th>Contact Category</th>
<th>Name/Position</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDU Consultant</td>
<td></td>
<td>84678</td>
</tr>
<tr>
<td>ED Majors Consultant</td>
<td></td>
<td>84059</td>
</tr>
<tr>
<td>Infection Control</td>
<td>Pamela Joannidis (Nurse Consultant and Lead)</td>
<td>80600/ 80326</td>
</tr>
<tr>
<td></td>
<td>Angela Johnson (Senior IPCN)</td>
<td>0141 2011707</td>
</tr>
<tr>
<td></td>
<td>Sharon Carlton (Administrator)</td>
<td>0141 4515599</td>
</tr>
<tr>
<td>Infection Diseases Consultant</td>
<td>Dr Conor Doherty</td>
<td>Page 18418 / 85265</td>
</tr>
<tr>
<td>Infection Diseases Consultant</td>
<td>Dr Rosie Hague</td>
<td>Page 18078 /85275</td>
</tr>
<tr>
<td>Microbiology lab</td>
<td></td>
<td>89132</td>
</tr>
<tr>
<td>PICU Consultant</td>
<td></td>
<td>84719</td>
</tr>
<tr>
<td>Resus space 1</td>
<td></td>
<td>84042</td>
</tr>
<tr>
<td>Resus space 4</td>
<td></td>
<td>84045</td>
</tr>
<tr>
<td>Virology lab (West of Scotland Specialist Virology centre)</td>
<td></td>
<td>50080</td>
</tr>
<tr>
<td>Public Health</td>
<td></td>
<td>01412014917/via switchboard</td>
</tr>
</tbody>
</table>

Useful Links

https://www.hps.scot.nhs.uk/a-to-z-of-topics/wuhan-novel-coronavirus/

WN-CoV: Laboratory Investigations and Sample Requirements
Version 1.0, 17 January 2020
Refer to detailed laboratory guidance for more information

LOCAL LABORATORIES

Two sets of samples are needed, for two distinct pathways
1. Common respiratory infection investigations – local laboratory
2. Coronavirus Investigations – PHE Colindale

LOCAL RESPIRATORY PATHOGEN TESTING
- Upper respiratory tract (nose/throat/nasopharyngeal sample in viral/universal transport medium)
- Lower respiratory tract if available (eg sputum, ETA or BAL)
- +/- other samples to identify bacteria

Recommended local investigations
Influenza virus, RSV, parainfluenza virus 1-3, adenovirus, human metapneumovirus; Legionella sp.; other viral, bacterial and fungal investigations as clinically indicated

PHE COLINDALE

PHE COLINDALE TESTING
- Upper respiratory tract (nose/throat/nasopharyngeal sample in viral/universal transport medium)
- Lower respiratory tract if available (eg sputum, ETA or BAL)
- Clotted blood/serum for serology (minimum 5 ml)
- EDTA blood sample for PCR (minimum 5 ml)
- Faecal Material (minimum 10 g)
- Urine

Molecular
- Pan-CoV
- Seasonal CoVs
- WN-CoV

Virus Isolation

Serology
Requires ACUTE (at illness onset) & CONVALESCENT sera 14 days apart

*(1) PHE Colindale will advise on sequential sampling on a case by case basis
(2) Any case investigated through Colindale must have convalescent sera 14 days after illness presentation
# If testing for avian influenza is also indicated following risk assessment, obtain separate samples and follow the PHE avian influenza guidance


Clotted tube is yellow top. EDTA tube is purple top or small pink top. **DO NOT SEND SAMPLES IN THE POD SYSTEM**