

Information received from Health Protection Scotland (now part of Public Health Scotland)

Extract from HPS Briefing Note 2020/01 - Cluster of pneumonia of unknown aetiology in Wuhan City, China 08/01/20 – update 1

For clinical microbiology, virology and infectious diseases services:

NHS microbiology/virology/ID services should communicate the information in this briefing note appropriately within their NHS Board, including with Emergency Departments and acute medical services.

Patients who present with pneumonia and have travelled to China in the 14 days prior to onset of symptoms should have a detailed travel and exposure history taken and be managed with appropriate infection prevention and control guidance.

For all patients who have pneumonia with onset within 14 days after travel to Wuhan city no

specific tool has been developed yet for this purpose so **we suggest re-purposing the existing avian influenza ones as follows:**

Follow the PHE protocols for suspected avian influenza (HPS are in the process of updating their versions to mirror PHE changes and will notify you when these have been changed) and in addition

Notify HPS:

- Office hours:
- Jim McMenamin (jim.mcmenamin@nhs.net, [redacted])
- [redacted] ([redacted]@nhs.net, [redacted])
- Out of hours:
- HPS On Call - 0141 211 3600
- Notify the local Health Protection Team;

Local liaison with virology/microbiology departments is important to ensure that appropriate

specimens are taken to establish the diagnosis. Use existing arrangements to contact the local microbiology, virology, infectious disease or respiratory consultants and discuss testing

arrangements for individual cases with the WoSSVC or Edinburgh SVC.

- WoSSVC (Tel: 0141 201 8722, for out of hours testing arrangements contact on-call
- virologist via switchboard 0141 211 4000);
- Edinburgh SVC (Tel: 0131 242 6086, for out of hours: 0131 536 1000);

For NHS board Health Protection Teams (HPTs):

Health Protection teams may be contacted about patients with pneumonia who have travelled to Wuhan City. They should advise the clinician to take a detailed travel and exposure history and to follow the recommendations above for clinical services. On receipt of calls, record dates of travel, details of the return flight to the UK, presence of any avian influenza risk factors (**as a proxy for Wuhan undiagnosed pneumonia**) and contact with human cases of severe respiratory illness. Records should be linked to the HPZone context 'China/Wuhan undiagnosed pneumonia'.

Follow the PHE protocols for suspected avian influenza and in addition:
Notify HPS:

- Office hours:
- Jim McMenamin (jim.mcmenamin@nhs.net, [redacted])
- [redacted] ([redacted]@nhs.net, [redacted])
- Out of hours:
- HPS On Call - 0141 211 3600

Clinical queries about the management of potential cases of severe respiratory infections in people should be directed in the first instance to the local infectious disease physician and / or the local respiratory physician.

For Microbiologists/Virologists:

Local laboratories may receive requests to test samples from patients who have travelled to Wuhan City. Please discuss testing arrangements for individual cases with the WoSSVC or Edinburgh SVC:

- WoSSVC (Tel: 0141 201 8722, for out of hours testing arrangements contact on-call virologist via switchboard 0141 211 4000);
- Edinburgh SVC (Tel: 0131 242 6086, for out of hours: 0131 536 1000);

All the Scottish virology laboratories have containment level 3 facilities available. All virology laboratories utilising the Glasgow developed influenza A matrix assay will be able to detect the virus as influenza A positive.

For influenza A positive and untypable samples from individuals exposed to avian influenza, local laboratory to initiate transfer of samples (enhanced category B) for further laboratory testing (H7and/ or H5 specific testing) to WoSSVC or Edinburgh SVC.

It may be appropriate to arrange for testing for influenza A and other respiratory pathogens in parallel to avian influenza specific typing at the WoSSVC or Edinburgh SVC for exposed individuals. Laboratories should be familiar with the local and national arrangements for the testing and transportation of specimens.

Extract from HPS Briefing Note 2020/02 - Cluster of pneumonia of unknown aetiology in Wuhan City, China 10/01/20 – update 2

On 7 January 2020, a media report interviewing a member of the Chinese Academy of Engineering, states that “a new coronavirus was detected in the laboratory, and the entire genome sequence of the virus was obtained. A total of 15 positive results of the new coronavirus were detected by nucleic acid detection methods. From one positive patient the virus was isolated from the samples and showed a typical coronavirus appearance under an electron microscope. The expert group believes that the pathogen of this unexplained case of viral pneumonia was initially identified as a new type of coronavirus.” The Chinese CDC also refers to the report of

XINHUA, the official press agency of China, reporting the detection of a new coronavirus.

The WHO Regional office for the Western Pacific posted a statement that also mentioned the “**preliminary determination of a novel (or new) coronavirus**, identified in a hospitalised person with pneumonia in Wuhan”.

Although the cluster in Wuhan City is not due to avian influenza, according to current reports, avian influenza has been reported in this region and it remains a possibility in returning travellers from Wuhan City.

The ongoing seasonal influenza epidemic in Southeast Asia with high activity might increase the number of possible cases due to respiratory illness and pneumonia not related to the event. It is therefore important to further investigate patients with pneumonia and travel history to Wuhan, China and initiate diagnostic laboratory testing to rule out other respiratory pathogens as aetiological agent.

No specific tests for this potentially new coronavirus are available. A pan-coronavirus testing system is however available for UK samples submitted to PHE through Scottish laboratories.

For clinical microbiology, virology and infectious diseases services:

The case definition being used across the UK reflects our current understanding from the limited epidemiology available and will likely be subject to change as new information emerges;

Interim definition: possible cases

If the patient satisfies epidemiological and clinical criteria, they are classified as a possible case.

Epidemiological criteria

- travel to Wuhan City in the 14 days before the onset of illness, or
- contact (see definition below) with confirmed cases of Wuhan novel coronavirus (WN-CoV)

Clinical criteria

- severe acute respiratory infection requiring admission to hospital with clinical or radiological evidence of pneumonia or acute respiratory distress syndrome, or
- fever or history of fever ($\geq 38^{\circ}\text{C}$) and acute respiratory infection (sudden onset of respiratory infection with at least one of: shortness of breath, cough or sore throat)

Any individual reporting any contact with a confirmed case of WN-CoV, even if asymptomatic, should be reported to the local Health Protection Team immediately.

Definition of contact

For the purposes of testing, contact with a case is defined as:

- living in the same household, or
- direct contact with the case or their body fluids or their laboratory specimens without recommended PPE, or in the same room of a healthcare setting when an aerosol generating procedure is undertaken on the case without recommended PPE, or
- within 2 metres of the case in any other setting not listed above, for any length of time.

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. See avian influenza guidance.

For all patients who meet the above definition **we suggest re-purposing the existing avian influenza ones as follows:**

Follow the PHE protocols for suspected avian influenza (HPS are in the process of updating their versions to mirror PHE changes and will notify you when these have been changed) and in addition:

Notify HPS:

Office hours:

- Jim McMenamin (jim.mcmenamin@nhs.net, [redacted])
- [redacted] ([redacted]@nhs.net, [redacted])

Out of hours:

- HPS On Call - 0141 211 3600
- Notify the local Health Protection Team;

Local liaison with virology/microbiology departments is important to ensure that appropriate specimens are taken to establish the diagnosis. Use existing arrangements to contact the local microbiology, virology, infectious disease or respiratory consultants and discuss testing arrangements for individual cases with the WoSSVC or Edinburgh SVC.

- WoSSVC (Tel: 0141 201 8722, for out of hours testing arrangements contact on-call virologist via switchboard 0141 211 4000);
- Edinburgh SVC (Tel: 0131 536 3373, for out of hours: 0131 536 1000);

For NHS board Health Protection Teams (HPTs):

Health Protection teams should communicate the information in this briefing note within their NHS Board, including with Emergency Departments, acute medical services and primary care. Health Protection teams may be contacted about patients with pneumonia who have travelled to Wuhan City. They should advise the clinician to take a detailed travel and exposure history and to follow the recommendations above for clinical services. On receipt of calls, record dates of travel, details of the return flight to the UK, presence of any avian influenza risk factors (as a proxy for Wuhan undiagnosed pneumonia) and contact with human cases of severe respiratory illness.

Records should be linked to the HPZone context 'Wuhan novel coronavirus'. Follow the PHE protocols for suspected avian influenza and in addition: Notify HPS:

Office hours:

- Jim McMenamin (jim.mcmenamin@nhs.net, [redacted])
- [redacted] ([redacted]@nhs.net, [redacted])

Out of hours:

- HPS On Call - 0141 211 3600

Clinical queries about the management of potential cases of severe respiratory infections in people should be directed in the first instance to the local infectious disease physician and / or the local respiratory physician.

For Microbiologists/Virologists:

Local laboratories may receive requests to test samples from patients who have travelled to Wuhan City. Please discuss testing arrangements for individual cases with the WoSSVC or Edinburgh SVC:

- WoSSVC (Tel: 0141 201 8722, for out of hours testing arrangements contact on-call virologist via switchboard 0141 211 4000);
- Edinburgh SVC (Tel: 0131 536 3373, for out of hours: 0131 536 1000);

As part of the differential diagnosis, avian influenza should be excluded:

- All the Scottish virology laboratories have containment level 3 facilities available. All virology laboratories utilising the Glasgow developed influenza A matrix assay will be able to detect the virus as influenza A positive.
- For influenza A positive and untypable samples from individuals exposed to avian influenza, local laboratory to initiate transfer of samples (enhanced category B) for further laboratory testing (H7 and/ or H5 specific testing) to WoSSVC or Edinburgh SVC.
- It may be appropriate to arrange for testing for influenza A and other respiratory pathogens in parallel to avian influenza specific typing at the WoSSVC or Edinburgh SVC for exposed individuals.

Laboratories should be familiar with the local and national arrangements for the testing and transportation of specimens.

No specific tests for this potentially new coronavirus are available, therefore local liaison with virology/microbiology departments is important to ensure that appropriate specimens are taken to establish the diagnosis.

Extract from HPS Briefing Note 2020/03 - Cluster of pneumonia of unknown aetiology in Wuhan City, China 17/01/20 – Update 3

On 31 December 2019, WHO was informed of a cluster of cases of pneumonia of unknown cause detected in Wuhan City, Hubei Province, China. On 12 January 2020 it was announced that a novel coronavirus (WN-CoV) had been identified in

samples obtained from cases and that initial analysis of virus genetic sequences suggested that this was the cause of the outbreak.

Initially 59 cases were reported, but following testing, the case count was reduced from 59 suspected to 41 confirmed cases, with illness onset dates between 8 December 2019 and 2 January 2020.

On 14 January 2020, authorities in Thailand reported that a traveller from Wuhan had been identified as unwell on arrival on 8 January and hospitalised the same day, and that the novel coronavirus had been detected in samples from this patient. It was reported that this patient had been to fresh food markets in Wuhan, but not the market associated with the cases reported by Chinese authorities. As of 15 January, no secondary cases have been reported by Thailand.

On 16 January 2020, authorities in Japan reported that the novel coronavirus had been detected in samples from a patient with pneumonia. The patient had been in Wuhan and arrived in Japan on 6 January 2020. Date of fever onset was 3 January 2020. He was hospitalised on 10 January and discharged on 15 January, having recovered from his illness. Japan reported that he had not visited the Huanan South China Seafood Market, but had potential close contact with unspecified pneumonia patients in China.

On 16 January 2020, the Wuhan Municipal Health Commission reported a further death among the severe cases hospitalised in the city.

As of 17 January 2020, no countries other than China, Thailand and Japan have identified confirmed cases, although some patients with acute respiratory infections and histories of recent arrival from Wuhan are being assessed in other countries in the region, including Hong Kong and Singapore.

The **ongoing seasonal influenza epidemic** in Southeast Asia with high activity might increase the number of possible cases due to respiratory illness and pneumonia not related to the event. It is therefore important to further investigate patients with pneumonia and travel history to Wuhan, China and initiate diagnostic laboratory testing to rule out other respiratory pathogens as aetiological agent.

2.4. Sampling and testing:

Arrange urgent diagnostic sampling. Local liaison with virology/microbiology departments is important to ensure that appropriate specimens are taken to establish the diagnosis.

Point-of-care tests (POCTs) should not be performed without discussion with the local laboratory.

The recommended minimum diagnostic sample set is:

- an upper respiratory tract sample (combined nose and throat viral swabs, or nasopharyngeal aspirate);
- EDTA blood and serum;

- a lower respiratory tract sample (e.g. sputum or an endotracheal tube aspirate). A **lower respiratory tract specimen** is encouraged to maximise the chances of detecting any pathogens. However, **avoid induction of sputum**.

Please reserve urine and stool if available, as these may be tested subsequently.

Testing should be undertaken in parallel for:

- **Common respiratory pathogens:** this can be tested as per your local current arrangements.
- AND
- **WN-CoV:** local lab will send samples to PHE Colindale (category B transport). Local lab must contact the PHE Colindale duty doctor to inform them of a case for testing (0208 200 4400). Do not wait for local results before sending these samples. These will be tested for the presence of novel coronaviruses.

It is essential to inform the laboratory before samples are sent, and ensure that specimen request forms are clearly marked with the relevant clinical and epidemiological history.

As part of the differential diagnosis, **avian influenza should be excluded:**

For influenza A positive and untypeable samples from individuals who meet criteria for avian influenza testing (see avian influenza guidance) the local laboratory should initiate transfer of samples (enhanced category B) for further laboratory testing (H7 and/ or H5 specific testing) to WoSSVC or Edinburgh SVC.

To discuss testing arrangements for individual cases, please contact the WoSSVC or Edinburgh SVC:

- WoSSVC (Tel: 0141 201 8722, for out of hours testing arrangements contact on-call virologist via switchboard 0141 211 4000);
- Edinburgh SVC (Tel: 0131 536 3373, for out of hours: 0131 536 1000);

Results of testing:

Results of testing should be provided to the referring clinician, referring lab and the local Health Protection Team. PHE Colindale Virus Reference Department, on provision of the results, will discuss with the referring lab/clinician whether repeat sampling is required or whether the patient can be removed from isolation.

The local Health Protection Team should communicate the testing results to HPS.

Recommendations for Microbiologists/Virologists

Local laboratories may receive requests to test samples from patients who have travelled to Wuhan City.

Actions for microbiologists/virologists:

1. Local testing for common respiratory pathogens should be undertaken in a Biological Safety Level 3 (BSL3) laboratory¹, and should include influenza testing and clinically appropriate testing for community acquired pneumonia pathogens.

2. Laboratories should be familiarised with:
 - a. the local and national arrangements for the testing and transportation of specimens;
 - b. the PHE Guidance on handling and processing of laboratory specimens specific for WN-CoV.
3. To discuss testing arrangements for individual cases, please contact the WoSSVC or Edinburgh SVC:
 - a. WoSSVC (Tel: 0141 201 8722, for out of hours testing arrangements contact on-call virologist via switchboard 0141 211 4000);
 - b. Edinburgh SVC (Tel: 0131 536 3373, for out of hours: 0131 536 1000).

Extract from HPS Briefing Note 2020/03 - Cluster of pneumonia of unknown aetiology in Wuhan City, China 24/01/20 – Update 4

On 31 December 2019, WHO was informed of a cluster of cases of pneumonia of unknown cause detected in Wuhan City, Hubei Province, China. On 12 January 2020 it was announced that a novel coronavirus (WN-CoV) had been identified in samples obtained from cases and that initial analysis of virus genetic sequences suggested that this was the cause of the outbreak. Case numbers have risen since the previous HPS briefing note of 17 January 2020 (alert ref 2020/03) when 41 confirmed cases were reported.

Situation in Scotland

HPS is aware of a number of individuals who are under investigation for possible infection with WN-CoV.

Background

Clinical features:

Fever, fatigue and dry cough are the main symptoms in the early stage of illness and some patients may not progress to more severe illness. WHO reports that 25% of confirmed cases are severe. Dyspnoea is said to be common in hospitalised patients, while vital signs are reported to be generally stable at the time of admission. Older patients with underlying disease are more likely to progress to severe disease. A variety of abnormalities may be expected on chest radiographs, but bilateral lung infiltrates appear to be common (similar to what is seen with other types of viral pneumonia).

The World Health Organization has issued interim guidance on the clinical management of suspected cases.

Further information on transmission and clinical features will be updated on the PHE WN-CoV background information page.

The **ongoing seasonal influenza epidemic** in Southeast Asia with high activity might increase the number of possible cases due to respiratory illness and pneumonia not related to the event. It is therefore important to further investigate patients with pneumonia and travel history to Wuhan, China and initiate diagnostic laboratory testing to rule out other respiratory pathogens as aetiological agent.

Although the cluster in Wuhan City is not due to **avian influenza**, according to current reports, avian influenza has been reported in this region and it remains a possibility in returning travellers from Wuhan City.

Clinical and Laboratory Guidance

HPS has developed guidance for investigation and initial management of WN-CoV. These documents are published on the WN-CoV page of the HPS website:

Infection prevention and control: Infection control advice: Severe Respiratory Illness from novel or emerging pathogens

Primary care: Wuhan novel Coronavirus (WN-CoV) guidance for Primary Care Management of patients presenting to primary care

Secondary care: Wuhan novel Coronavirus (WN-CoV) Guidance for secondary care Health Protection Teams: Wuhan novel Coronavirus (WN-CoV) Guidance for Health Protection Teams (HPTs)

HPS guidance for sampling and laboratory investigations: Wuhan novel coronavirus (WN-CoV) Guidance for sampling and laboratory investigations

Please note that two sets of samples need to be collected: one for local testing and one to be sent to PHE Colindale. This is outlined in the HPS Sampling and Laboratory Guidance.

HPS has been advised that turnaround time for WN-CoV samples submitted to Public Health England for testing is currently 24 to 48 hours.

Extract from HPS Briefing Note 2020/07 - Cluster of pneumonia of unknown aetiology in Wuhan City, China 31/01/20 – Update 5

Situation in Scotland

HPS is aware of a number of individuals who have been under investigation and tested negative for possible infection with WN-CoV. For information on case numbers in Scotland please see the Scottish Government WN-CoV test numbers page

NHS24 has set up a dedicated Wuhan novel coronavirus helpline. Information for the general public has also been added to NHS Inform.

Clinical and Laboratory Guidance

The WN-CoV page of the HPS website contains the WN-CoV guidance documentation which is in the public domain.

NEW Waste disposal. Category A waste disposal flowchart. This provides clarity on how Category A waste should be handled for safe onward disposal including contact details for NHS Scotland.

UPDATED Infection prevention and control. Infection control advice: Severe Respiratory Illness from novel or emerging pathogens This include an update on environmental decontamination in secondary care settings and clarity around air changes following an aerosol generating procedure.

UPDATED Primary care. Wuhan novel Coronavirus (WN-CoV) guidance for Primary Care Management of patients presenting to primary care. This includes an updated algorithm, addition of guidance on environmental cleaning and guidance on putting on and taking off personal protective equipment.

TO BE UPDATED ON 31/01/2020 HPS guidance for sampling and laboratory investigations. Wuhan novel coronavirus (WN-CoV) Guidance for sampling and laboratory investigations.

Secondary care. Wuhan novel Coronavirus (WN-CoV) Guidance for secondary care Health Protection Teams. Wuhan novel Coronavirus (WN-CoV) Guidance for Health Protection Teams (HPTs)

Additional HPS WN-CoV guidance documentation is available on SHPIR.

NEW Guidance on home isolation for patients undergoing testing for WNCov-V.

NEW Minimum Dataset Form to be completed for ALL possible cases.

Reporting of results

We ask that as a minimum, the local laboratory should communicate results received from PHE Colindale to the requesting clinician, the local Health Protection team and the Health Protection Scotland Coronavirus mailbox:
NSS.HPSCoronavirus@nhs.net.

Extract from HPS Briefing Note 2020/07 - Cluster of pneumonia of unknown aetiology in Wuhan City, China 31/01/20 – Update 6

New case definitions

The spread of cases across China has prompted a change in case definitions used within the UK

Possible case definition:

If the patient satisfies epidemiological **and** clinical criteria, they are classified as a **possible case**.

Epidemiological criteria:

In the 14 days before the onset of illness:

- travel to Mainland China (not including Hong Kong and Macao)

OR

- contact with confirmed cases of WN-CoV in the last 14 days

Clinical criteria:

- severe acute respiratory infection requiring admission to hospital with clinical or radiological evidence of pneumonia or acute respiratory distress syndrome

OR

- acute respiratory infection of any degree of severity (including at least one of: fever, cough, or shortness of breath)

Clinicians should be alert to the possibility of atypical presentations in patients who are immunocompromised.

Any individual reporting any contact with a confirmed case of 2019N-CoV, even if asymptomatic, should be reported to the **local Health Protection Team (HPT)** immediately.

Situation in Scotland

HPS is aware of a number of individuals who have been under investigation and tested negative for possible infection with WN-CoV. For information on case numbers in Scotland please see the Scottish Government WN-CoV test numbers page.

NHS24 has set up a dedicated Wuhan novel coronavirus helpline. Information for the general public has also been added to NHS Inform.

A CMO letter with updated information will be issued later today.

Situation in the rest of the UK

On January 31, 2020, the Chief Medical Officer for England announced that two individuals from the same family have tested positive for coronavirus.

Assessment

Assessment based on available information to date is as follows:

- Current impact of the disease is: Low/Moderate
- Based on currently available information on the transmission of the disease the risk to public health:
 - in the UK is considered: Moderate
 - to UK travellers in affected areas: Moderate Please note this risk assessment may be subject to change.

Recommendations

Actions for travellers returning from China.

- All travellers who have been in Hubei Province in the past 14 days and have no symptoms should self isolate till the end of the 14 day period
- Travellers who have been in any other part of mainland China, excluding Hong Kong or Macao in the past 14 days and who have no symptoms, can continue their usual activities
- Travellers who have been in any part of mainland China and have acute respiratory symptoms (fever, cough or shortness of breath) should call their GP practice or NHS 24 using the number 111. Individuals should not attend their GP surgery in person, but should telephone for advice from home

Actions for anyone who has been in contact with a confirmed case

- Anyone who has been in contact with a confirmed case in the past 14 days and has no symptoms should self isolate till the end of the 14 day period. They should contact their GP practice or NHS 24 using the number 111.
- Anyone who has been in contact with a confirmed case and has acute respiratory symptoms (fever, cough or shortness of breath) should call their GP practice or NHS 24 using the number 111. Individuals should not attend their GP surgery in person, but should telephone for advice from home.

Advice for the General Public

For information on WN-CoV, the public should be directed to NHS Inform or asked to call the NHS24 dedicated Wuhan Coronavirus Helpline on 0800 028 2816. Please note that updated information has been provided to NHS Inform and will be uploaded to the website as soon as

Clinical and Laboratory Guidance

The WN-CoV page of the HPS website contains the WN-CoV guidance documentation which is in the public domain.

NEW Waste disposal. Category A waste disposal flowchart. This provides clarity on how Category A waste should be handled for safe onward disposal including contact details for NHS Scotland.

UPDATED Infection prevention and control. Infection control advice: Severe Respiratory Illness from novel or emerging pathogens This include an update on environmental decontamination in secondary care settings and clarity around air changes following an aerosol generating procedure.

UPDATED Primary care. Wuhan novel Coronavirus (WN-CoV) guidance for Primary Care Management of patients presenting to primary care. This includes an updated algorithm, addition of guidance on environmental cleaning and guidance on putting on and taking off personal protective equipment.

TO BE UPDATED ON 31/01/2020 HPS guidance for sampling and laboratory investigations. Wuhan novel coronavirus (WN-CoV) Guidance for sampling and laboratory investigations.

Secondary care. Wuhan novel Coronavirus (WN-CoV) Guidance for secondary care Health Protection Teams. Wuhan novel Coronavirus (WN-CoV) Guidance for Health Protection Teams (HPTs)

Additional HPS WN-CoV guidance documentation is available on SHPIR.

NEW Guidance on home isolation for patients undergoing testing for WNC0-V.

NEW Minimum Dataset Form to be completed for ALL possible cases.

Reporting of results

We ask that as a minimum, the local laboratory should communicate results received from PHE Colindale to the requesting clinician, the local Health Protection team and the Health Protection Scotland Coronavirus mailbox:

NSS.HPSCoronavirus@nhs.net.

Extract from minutes of HPS lead IMT Wuhan Novel Coronavirus Monday 13 January 2020, 13:00

Background & Current situation & Epidemiology

Colleagues in PHE have provided assurance that the pancoronavirus test they have available through Colindale should pick up this novel coronavirus. This is because it had identified the SARS Coronavirus and MERS Coronavirus. For the immediate future this test would only be available by referring samples to Colindale for testing.

Diagnostics and Virology

JMcM said from mid-week onwards Professor Maria Zambon (PHE Colindale) would organise a meeting with colleagues in all administrations to further discuss diagnostics. Three Scottish colleagues have been nominated to attend this – [redacted], [redacted] and [redacted]. Feedback will be made available to everyone in due course.

There are no specific diagnostic tests for this novel Coronavirus and it will be many weeks before the assay is available initially through the single centre (PHE Colindale). This will likely take in excess of 6-8 weeks followed by assessment of the assay. Realistically it will be a few months before the diagnostic test is available to us.

Extract from Draft Guide for HPTs: Possible cases of Wuhan novel coronavirus (Wn-CoV) and related queries 31/01/20

1. Actions when contacted by primary care regarding a possible case of WN-CoV

Refer the GP to the guidance for primary care. If the person is still in the GP surgery ask the GP to isolate the person in a separate room or withdraw from the room if identified during a consultation. If they are at home, they should stay at home in self-isolation, be assessed according to the case definition by telephone consultation and wait while arrangements are made. Advise the GP to contact their local secondary care infection specialist (ID physician / consultant microbiologist or virologist) to seek further specialist advice and agreement on whether the person meets the case definition. **The GP will need to agree a plan with their secondary care infection specialist and HPT for assessment and testing of the patient, including arrangement of a safe route of transport to hospital (see below).**

3. Actions when contacted by secondary care about a possible case of WNCov

If the possible case meets the criteria for a **severe case (defined as requiring high dependency unit of intensive care unit support)**, the HPT should:

- Identify individuals who are household contacts (or equivalent to household contacts)

- Ask that they self isolate until results of the index case's tests are available.
- Alert the hospital looking after the index case that there are household contacts (or equivalent) who may require assessment if they become unwell
- Ensure that they have an HPT 24 hour contact number to call if they become unwell
- Start to gather information on healthcare and other contacts since symptom onset in preparation for contact tracing should the possible case test positive for WNCov. Record any flight details.

4. Home isolation of POSSIBLE cases whilst awaiting results

Some patients who are clinically well and have appropriate home environments may go into home isolation, following risk assessment by the HPT. Home isolation is currently only agreed for possible cases for the 24-48 hours whilst they await results, on a case-by-case basis; it cannot be undertaken for any confirmed case at present. Detailed guidance on home isolation for patients undergoing diagnostic testing for Wuhan novel coronavirus is available on SHPIR. This includes written information to provide to possible cases and their household members

The patient must have been assessed and sampled in a secondary care setting before they can be home isolated. Undertake a joint risk assessment for home isolation with the attending clinician. Safe transport home (as for transport to the hospital) must be arranged.

Extract from Readout from HPS/NHS Board IMT - novel coronavirus (2019-nCoV) meeting 31 January 2020

1. Diagnostics and Virology: Rollout of regional testing is ongoing. Validation protocol would normally take 3 to 4 weeks but under pressure from 4 CMOs that process is aiming to complete around the 20th February. They are aware that FM would like a much quicker availability, the official line is still 2 to 3 weeks. The aim will still be a 2 sites start (Glasgow and Edinburgh) and HPS have undertaken to keep us informed about developments early next week. They are very aware of the potential for increasing pressure to expedite this service in Scotland.
2. The question about community based testing as opposed to Hospital based testing was raised. No solution has yet been identified but is currently being examined.

Email from HPS to SG on pancoronavirus test

From: MCMENAMIN, Jim (NHS NATIONAL SERVICES SCOTLAND)
<jim.mcmenamin@nhs.net>

Sent: 16 January 2020 12:00

To: {redacted}@gov.scot>; Riley A (Andrew) Dr <Andrew.Riley2@gov.scot>;
AHMED, Syed (NHS NATIONAL SERVICES SCOTLAND) <syed.ahmed2@nhs.net>

Cc: MEDIARELATIONS (NHS NATIONAL SERVICES SCOTLAND)
<nss.mediarelations@nhs.net>; <{redacted}@gov.scot>; Grieve DA (Derek)
<Derek.Grieve@gov.scot>

Subject: Re: Confidential - UK symptomatic individual under investigation for Wuhan novel coronavirus - not classed as a possible case to date

Hi {redacted}

Testing is complicated - PHE are not promising when any result would be available.

Just to be clear even if this test was positive it would indicate the patient has a coronavirus i.e. could be a possible/probable case but not identify which coronavirus they had - this would require sequencing and comparison with the recently posted genomic information. My best guess would be PHE might have a result from the pan-coronavirus later tonight for presentation at tomorrow's planned IMT. Unclear as yet how long it would take to have the confirmation sequencing result but at least another day if not more.

Best wishes

Jim

Dr Jim McMenamin
Consultant Epidemiologist
Interim Clinical Director
Respiratory Team
Health Protection Scotland
NHS National Services Scotland
4th Floor
Meridian Court
5 Cadogan Street
Glasgow
G2 6QE

Tel: {redacted}

Fax: 0141 300 1100

Email: jim.mcmenamin@nhs.net

<http://www.hps.scot.nhs.uk>

Please consider the environment before printing this email.

NHS National Services Scotland is the common Name for the Common Services Agency for the Scottish Health Service. www.nhsnss.org

Email from HPS to SG regarding testing capacity in Scotland

From: "MCMENAMIN, Jim (NHS NATIONAL SERVICES SCOTLAND)"
<jim.mcmenamin@nhs.net>
Date: 30/01/2020 13:12 (GMT+00:00)
To: [redacted]@scotland.gsi.gov.uk
Cc: [redacted]@nhs.net>, [redacted]@nhs.net>
Subject: Fw: Request from FM

Dear [redacted]

Response agreed within HPS as follows

The availability of testing capability in Scottish laboratories is still some weeks off (scenarios range from best case of mid-next week out totwo weeks). This is because reagents, positive control material (i.e. samples that should test positive from previously positive patients) and familiarity with the testing system take some time.

Roll out of the testing system appear equitable from our PHE Colindale colleagues to all of the DA's and the English regions.

Two NHS testing laboratories (Glasgow and Edinburgh) have already received the reagents to enable future testing of samples. They await courier delivery of the positive control material (Positive material being shared may be a limiting factor as this enables the laboratories to begin evaluating the testing system - this allows them to show the tests perform as they are promised to do). These results need to be demonstrably consistent with the PHE service. This courier arrangement is being expedited.

Once available HPS will communicate with our NHS board colleagues to arrange for this testing to be done in Scotland.

Further meetings arranged for 4pm today and 11am tomorrow with PHE by which time we should have a clearer picture

Best wishes

Jim

Dr Jim McMenamin
Consultant Epidemiologist
Interim Clinical Director
Respiratory Team
Health Protection Scotland
NHS National Services Scotland
4th Floor
Meridian Court
5 Cadogan Street
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Chief Medical Officer

Extract from readout of four nations CMO meeting 29th January 2020

Subject: Read-out from 4 CMOs meeting today (29 January)

Please see below read-out from the 4 CMOs meeting that took place earlier today.

Present:
All 4 CMOs

Case definition –

- There are two parts to the case definitions: Geographical and Clinical.
 - Geographical: There is a need to amend the geographical definition to extend to ALL China. Should institute this from tomorrow.
 - Clinical: There is a need to amend the clinical definition to make it simpler and more accurate. Advice being sought from clinicians who have seen a large number of cases so far (primarily in London). This change will be instituted and revised guidance issued asap.
- Changes to both aspects of the case definition must be instituted in a co-ordinated way and CMOs have agreed it will be the same across the 4 nations. Need to upscale capacity for testing to meet demand after case definition changes.
- Consideration must also be given to the current guidance on when to: 'self-isolate' and wait and when cases should be advised to present for 'testing'.
- If people feel ill, they should self-isolate. That does not mean that it will be necessary to test everyone who chooses to self-isolate. The threshold for testing will be higher than for self-isolation.

Advice from Advisory Committee on Dangerous Pathogens (ACDP)

Extract from Readout from ADVISORY COMMITTEE ON DANGEROUS PATHOGENS ACDP Wuhan Novel Coronavirus Friday 31st January 2020, 11:00

Background

- For diagnostic samples, PHE has issued interim guidance that laboratory specimens from patients being tested for WN-CoV should be transported in accordance category B transport regulations in the UK; this mirrors PHE's current transport category recommendation for Middle East respiratory virus (MERS-CoV).
- Neither the WHO guidance documents on infection prevention and control guidance for healthcare or on laboratory testing for WN-CoV make specific reference to the categorisation of waste or specimens.
- Novel coronaviruses are not included on the WHO list (2019) if indicative examples of infectious substances included in category A, which are viewed as high consequence dangerous goods. The definition for high consequence dangerous goods is "those which have the potential for misuse in a terrorist event and which may, as a result, produce serious consequences such as mass casualties, mass destruction or, particularly for Class 7, mass socio-economic disruption."
- There is no direct link between ACDP hazard groups and classification for transport and there are number of hazard group 3 pathogens that are not classified as Category A. For example, cultures of anthrax would be moved as Category A but samples and patient waste remain Category B.
- Thus, any waste from a WN-CoV positive patient would be transported as per local policy as category B waste.

Outcome:

1. **ACDP unanimously supports the categorisation of clinical waste as category B. HSE supported this view. The only form of clinical waste that should be handled as category A waste would be if the waste were in the form of cultures. The equivalence of clinical waste from Highly Pathogenic Avian Influenza and MERS CoV is also handled as category B waste.**
2. **Healthcare providers currently have systems in place for packaging, storage, transportation and disposal of category B waste.**
3. **The use of blood gas analysers and point of care tests was also discussed and could be considered on an individual risk assessment basis. Mike Jacobs felt strongly that blood gas machines specifically should only be used in containment facilities not in an open setting unless full HCID PPE use was already in place. ACDP agreed and encouraged a local risk assessment and the avoidance of using blood gas analysers and POC analysers should be the position unless a clear risk assessment was in place.**
4. **ACDP will finalise the wording for immediate use in the current circumstances.**