PROCEDURE FOR CASE MANAGEMENT
FOR A SUSPICION OF A 2019-NCOV CORONAVIRUS INFECTION

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In collaboration with

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healthy all life long

1. Is the patient a possible 2019-nCoV patient?

Based on the case definition of the European Centre for Disease Control, Belgium defines the following patients as possible 2019-nCoV patients who should be further investigated:

Any person fulfilling the **epidemiological AND clinical criteria** should be tested for 2019-nCoV. The laboratory test should be initiated immediately when the below criteria are fulfilled.[1]

Clinical criteria

- Any person with clinical symptoms compatible with severe acute respiratory infection seeking healthcare or admitted to hospital with clinical or radiological evidence of pneumonia

Epidemiological criteria

- Any person with travel-history to China[2] in the 14 days before the onset of illness
  OR
- Any person being in close contact[3,4] with a laboratory-confirmed case of 2019-nCoV in the 14 days before the onset of illness.

**Incubation period is still uncertain, last estimation provided on 22/01 is 7 days (2-12)*

[1] Currently there is limited information about the best point in time for specimen collection. In analogy to other viral respiratory infections, it is likely that respiratory specimens collected early during the course of infection would yield higher virus concentrations. Subsequent specimens should also be collected during the course of infection.

[2] See http://en.nhc.gov.cn/2020-01/21/c_75990.htm for the most recent information on affected areas

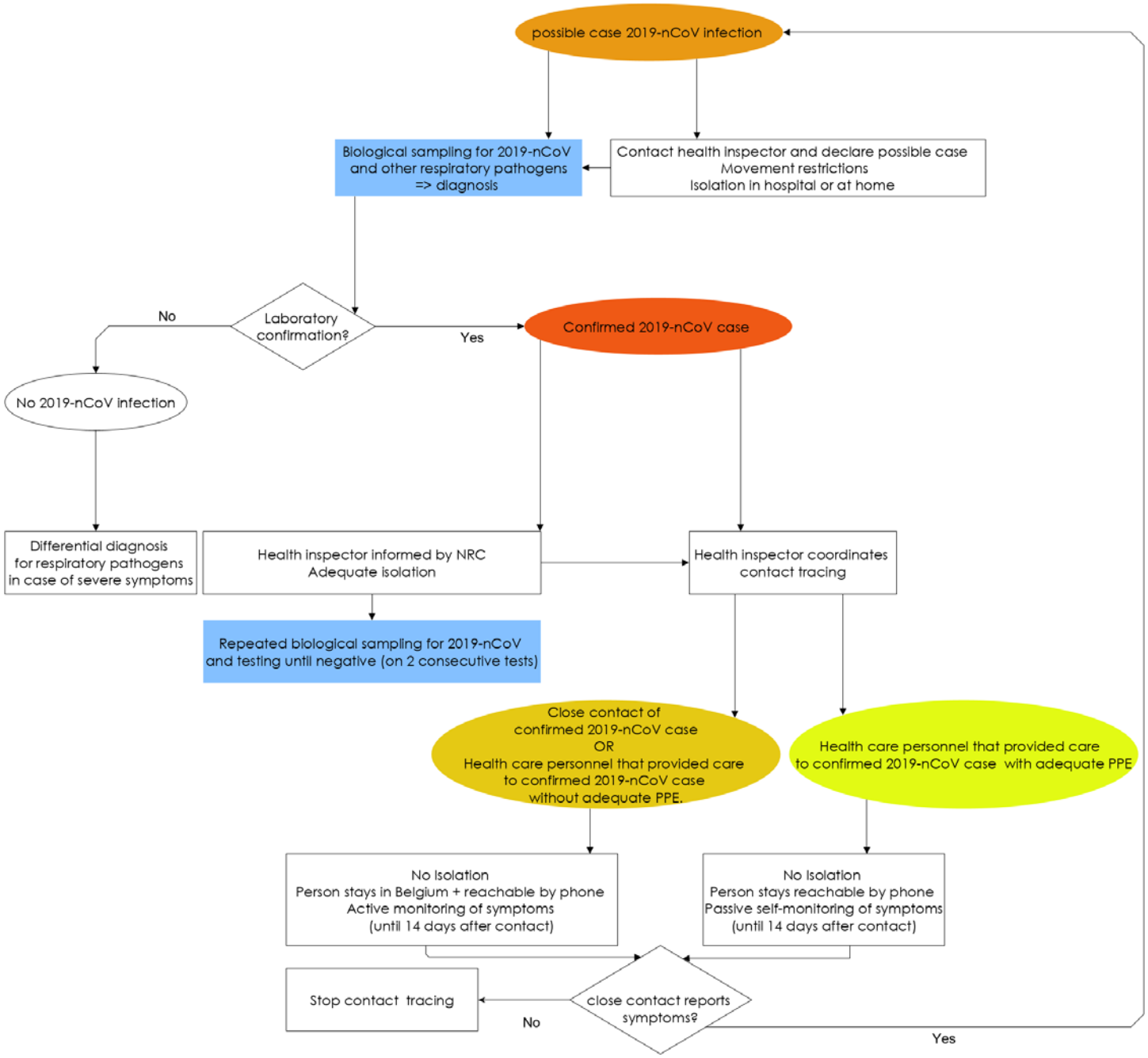
[3] Close contact defined by ECDC: family members or people living in the same household; close (< 2m distance) or direct contact with the person e.g. health care or laboratory worker, direct exposure to body fluids or specimens including aerosol;

[4] Close contact defined by WHO:

- Health care associated exposure, including providing direct care for nCoV patients, working with health care workers infected with nCoV, visiting patients or staying in the same close environment of a nCoV patient.
- Working together in close proximity or sharing the same classroom environment with a with nCoV patient
- Traveling together with nCoV patient in any kind of conveyance
- Living in the same household as a nCoV patient

The epidemiological link may have occurred within a 14-day period before or after the onset of illness in the case under consideration.

2. Decisional flowchart



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3. Indications for laboratory testing

In general, laboratory testing for 2019-nCoV is indicated in the following circumstances:

1. Confirmation (or exclusion) of possible 2019-nCoV patients
2. Criteria of removal of quarantine for the confirmed cases
3. Early diagnosis of 2019-nCoV infection among close contacts of confirmed cases

For each of these scenarios, a procedure will be described in this document.

4. Case management of possible 2019-nCoV Patients

4.1.CONTACT THE REGIONAL PUBLIC HEALTH AUTHORITIES

Complete the questionnaire in annex and contact the regional health authority.

- Vlaanderen:

  Within office hours: www.zorg-en-gezondheid.be/contact-infectieziektebestrijding-en-vaccinatie

  - Antwerpen: 03/224.62.06
  - Limburg: 011/74.22.42
  - Oost-Vlaanderen: 09/276.13.70
  - Vlaams-Brabant: 016/66 63 53
  - West-Vlaanderen: 050/24.79.15

  outside office hours: 02/512.93.89

- Brussel Hoofdstedelijk Gewest – Région de Buxelles-Capitale: 0478/77.77.08
- Wallonie (AVIQ) et Ostbelgien : 071/20.51.05

4.2.COLLECT BIOLOGICAL SPECIMENS FROM THE POSSIBLE CASE AND PERFORM LABORATORY TESTING

4.2.1. Collecting and sending the samples

- Immediately collect
  - upper (oropharyngeal and nasopharyngeal swabs, see Annex B) and, unless impossible, lower respiratory tract samples (sputum, BAL)[5]
  - and 1 serum sample (+ collect a second sample 2-3 weeks later)
- use the lab request form in Annex A or **page 2** of the following lab request form
  - NL: https://www.wiv-isp.be/epidemio/NRC/foRMs/aanvraagformulier_respiratoire.pdf
  - FR: https://www.wiv-isp.be/Epidemio/NRC/FORMS/Formulaire_Respiratoires.pdf
- send (using triple package systems) the samples or deliver them by hand to the NRC Respiratory Pathogens after contacting Prof. Marc Van Ranst (0475/510158) or Lize Cuypers (016/344006).

For patients with possible 2019-nCoV who have an epidemiological link with Chinese provinces where human influenza A(H7N9) infections have been reported[6] and who had contact with live poultry, in consultation with the regional health authority, exclusion of this pathogen may be considered.[7]

4.2.2. WHO definition of laboratory confirmation

A 2019-nCoV infection may be laboratory confirmed by detection of viral nucleic acid or serology.

A case of 2019-nCoV confirmed by serology requires demonstration of sero-conversion in 2 samples ideally taken at least 14 days apart, by a screening (ELISA, IFA) and a neutralization assay.

Be aware that the detection of another respiratory pathogen does not exclude a 2019-nCoV co-infection.

For more detailed information, see WHO document "Laboratory testing for 2019 novel coronavirus (2019-nCoV) in suspected human cases Interim guidance 17 January 2020"[8]

4.2.3. Procedure in case of an inconclusive laboratory test

Patients with an inconclusive initial test should undergo additional virological and serological testing to determine if the patient can be classified as a confirmed 2019-nCoV case.

It is strongly advised that multiple lower respiratory tract specimens such as sputum, endotracheal aspirate, or bronchoalveolar lavage fluid be collected and tested.

[5] Use airborne precautions if performing aerosol-generating procedures.

[6] Beijing, Chongqing, Shanghai and Tianjin Municipalities; Anhui, Fujian, Gansu, Guangdong, Guizhou, Hebei, Heilongjiang, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Jilin, Liaoning, Qinghai, Shaanxi, Shanxi, Shandong, Sichuan, Taiwan, Yunnan and Zhejiang Provinces; Hong Kong SAR, Macao SAR; Guangxi, Inner Mongolia, Ningxia Hui, Tibet and Xinjiang Uyghur Autonomous Regions

[7] A similar set of samples may be sent to the NRC Influenza (using triple package systems). The accompanying lab request form can be downloaded from https://www.wiv-isp.be/Epidemio/NRC/FORMS/Formulaire_influenza.pdf

[8] https://www.who.int/health-topics/coronavirus/laboratory-diagnostics-for-novel-coronavirus

If initial testing of a nasopharyngeal swab is negative in a patient who is strongly suspected to have 2019-nCoV infection and if lower respiratory tract specimens are not possible, then patients should be retested by repeat nasopharyngeal and oropharyngeal specimens (repeat every 4 days till 14 days after onset of symptoms) and appropriately timed paired acute and convalescent sera.

Other types of clinical specimens could also be considered for molecular testing if necessary, including blood/serum, urine and stool.

4.3.TAKE INFECTION CONTROL PRECAUTIONS FOR THE POSSIBLE CASE

4.3.1. Hospital or home isolation

- The patient should avoid contact with others, certainly people with increased risk. The groups currently considered to be at increased risk for 2019-nCoV infection include the same as those at risk for MERS-CoV: those with chronic heart, lung or kidney conditions; diabetes, immunosuppression, blood disease and adults over 60 years of age. Currently there is no evidence to suggest increased risk for the 2019-nCoV infection for pregnant women, but it may be prudent to prevent them from contact with the ill person.[9]
- In view of the currently limited knowledge of the disease caused by 2019-nCoV infection and its transmission patterns, WHO recommends that suspected cases of 2019- nCoV infection be isolated and monitored in a hospital setting. However, patients with mild symptoms and without underlying chronic conditions and symptomatic patients no longer requiring hospitalization may be cared for in the home environment.[10]
- In agreement of the health inspector and the infectiologist of CHU Saint-Pierre, confirmed symptomatic cases with severe symptoms or with underlying conditions should be admitted to hospital whenever possible[10], most preferably to the reference hospital **(CHU Saint-Pierre, during working hours: 02/535.50.09; outside working hours: 0479/83.80.13 or 02/535.31.11).**
- The decision to transfer the ill person from home observation to the hospital should be made based on either clinical or laboratory findings or both. For the benefit of the patient, it is preferable to transfer patient as soon as possible. The risk of rapid clinical deterioration is high in confirmed cases. In that case, the transfer becomes more risky for the patient and more difficult to organize.

4.3.2. Transport of the patient under investigation

- Transport of patient to the hospital needs to be discussed with the regional health authorities.
- Use a dedicated ambulance. CHU Saint Pierre has a convention with an ambulance company (M2, 02/411.11.21) for transportation of possible and confirmed 2019-nCoV cases to St Pierre. The personnel of this company are specifically trained for this work and have the required PPE (and even PAPR) mask.
- While traveling to seek care, the patient should wear a medical mask, perform appropriate hand hygiene and respiratory hygiene and should stay as far away from others as possible. Open the windows of the vehicle if possible.

[9] https://apps.who.int/iris/bitstream/handle/10665/272948/WHO-MERS-IPC-18.1-eng.pdf?ua=1). k

[10] https://www.who.int/internal-publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-(nCoV)-infection-presenting-with-mild-symptoms-and-management-of-contacts

- Avoid public transportation to the health care facility.
- Healthcare workers who are transporting patients should wear appropriate personal protective equipment (gown, FFP2 mask, eye protection and gloves) and perform hand hygiene.
- Surfaces soiled during transport should be cleaned with regular household cleaners and broad spectrum disinfectant product.

4.3.3. Duration of isolation

- A possible 2019-nCoV patient is isolated until the laboratory tests as described in chapter 4.2.2 are negative. If initial testing of only an upper respiratory specimen is negative in a patient suspected of having 2019-nCoV infection, repeat testing should be performed .[11]
- A confirmed 2019-nCoV patient is isolated until two consecutive upper respiratory tract samples (oropharyngeal swabs) taken at least 24 hours apart test negative on Rt-PCR in a clinically recovered patient.[12]
- Collect lower respiratory tract samples specimens and repeat tests if clinical or epidemiological evidence is suggestive or if initial specimen was of poor quality (repeat every 4 days till 14 days after onset of symptoms).

[11] https://apps.who.int/iris/bitstream/handle/10665/178252/WHO_MERS_SUR_15.2_eng.pdf?ua=1

[12] Management of asymptomatic persons who are RT-PCR positive for MERS-CoV: Interim guidance. Geneva, Switzerland: World Health Organization; 2018.

4.3.4. Infection prevention and control measures in case of home or hospital isolation

Patients with possible/confirmed 2019-nCoV infection require standard, droplet (when home isolation), contact and, when performing aerosol generating procedures, airborne precautions (when hospital isolation).[13]

	Home Isolation	Hospital Isolation
Isolation	- Limit contact with the ill person as much as possible (different room, > 1 m distance). - Anyone who is at increased risk[14] of severe disease does not care for the ill person or come into close contact with the ill person. - Avoid other types of exposure to the ill person or contaminated items in the immediate environment of the ill person; for example, avoid sharing eating utensils, drinks, towels, washcloths or bed linen.	- Patient if possible in airborne precaution room: single room or, in case of confirmed patient, with patients with same diagnosis - Transportation of patient outside of designated room is kept to a minimum + patient should wear medical mask if outside room - Dedicate specific equipment for use with single patient In case of clinical deterioration: a separate ICU room.
Hygiene	- Hand hygiene following all contact with the ill person or his/her immediate environment and immediately after removing any item of PPE - Respiratory hygiene and cough etiquette	
PPE	- Within a 1 meter range: caregiver should wear a medical mask + remove safely immediately afterwards - Health carer should avoid touching face, eyes or mouth with (gloved) hands - Use disposable gloves and protective clothing (e.g. Plastic aprons) to provide oral or respiratory care, when handling stool and urine and when cleaning or handling surfaces, clothing or linen soiled with body fluids.	- At every entry of the room: use gloves, gown, eyewear and, if possible, FFP2 mask + remove safely immediately afterwards - Health carer should avoid touching face, eyes or mouth with (gloved) hands

[13] For more detailed information, see

- "Home care for patients with suspected novel coronavirus (nCoV) infection presenting with mild symptoms and management of contacts. WHO, 20 January 2020."
- "Infection control strategies for specific procedures in health-care facilities: a quick reference guide: epidemic-prone and pandemic-prone acute respiratory diseases. Who, 2008."
- ""Clinical management of severe acute respiratory infection when novel coronavirus (nCoV) infection is suspected. WHO, 11 January 2020."

[14] No specific information is available yet for 2019-nCoV, but the groups currently considered to be at increased risk for MERS-CoV infection include: those with chronic heart, lung or kidney conditions; diabetes, immunosuppression, blood disease and adults over 60 years of age. Currently there is no evidence to suggest increased risk for the MERS-CoV infection for pregnant women, but it may be prudent to prevent them from contact with the ill person. (https://apps.who.int/iris/bitstream/handle/10665/272948/WHO-MERS-IPC-18.1-eng.pdf?ua=1).

	Home Isolation	Hospital Isolation
Ventilation/when performing aerosol-generating procedures[15]	Shared spaces (e.g. kitchen, bathroom) and the ill person's room should be well ventilated (e.g. keep windows open)	- Place patient in airborne precaution room with >= 6-12 air changes/hour plus control of airflow direction - Use FFP2 mask - Use particulate respirator when entering and providing care within patient isolation facilities
Cleaning and laundry	– Discard materials used to cover the mouth or nose, or clean them appropriately after use (e.g. Use disposable tissues using regular soap or detergent and water). – Eating utensils and dishes should be cleaned with soap and water after use. – Clean frequently touched surfaces such as bedside tables, bedframe, and other bedroom furniture daily with regular household cleaners or a diluted bleach solution (1 part bleach to 99 parts water). – Clean bathroom and toilet surfaces daily with regular household cleaners or a diluted bleach solution (1 part bleach to 9 parts water). – Clothes, bedclothes, bath and hand towels, etc., of the ill person can be cleaned using regular laundry soap and water, and dried thoroughly. Place contaminated linen into a laundry bag. Soiled laundry should not be shaken and direct contact of the skin and clothes with the contaminated materials from the ill person should be avoided.	
Waste management	Gloves, tissues, masks, and other waste generated by the ill person or in the care of the ill person should be bagged (placed in a lined container in the ill person's room) before disposal with other household waste.	

[15] Some aerosol generating procedures have been associated with increased risk of transmission of coronaviruses (SARS-CoV and MERS-CoV) such as tracheal intubation, non-invasive ventilation, tracheotomy, cardiopulmonary resuscitation, manual ventilation before intubation and bronchoscopy.

5. Case management of a confirmed 2019-nCoV Patient

5.1.CASE DEFINITION

A confirmed case is a person with laboratory confirmation of 2019-nCoV infection, irrespective of clinical signs and symptoms. Confirmatory laboratory testing requires a positive PCR on at least two specific genomic targets or a single positive target with sequencing on a second.

5.2.ACTIONS OF THE REGIONAL PUBLIC HEALTH AUTORITIES

See chapter 4.1 for contact details, should the regional health authority not have been contacted yet.

The regional public health authorities will list the close contacts and advise on testing and adequate precautions for these contacts.

5.3.TAKE INFECTION CONTROL PRECAUTIONS

5.3.1. Hospital or home isolation

See chapter 4.3.1

5.3.2. Transport of the patient under investigation

See chapter 4.3.2

5.3.3. Duration of isolation through sample collection

- Collect at least weekly (but preferably each 2 - 4 days) a (upper) respiratory tract sample.
- Following the first negative Rt-PCR test, collect daily a (upper) respiratory tract sample.
- The patient is isolated until two consecutive upper respiratory tract samples (oropharyngeal swabs) taken at least 24 hours apart test negative on Rt-PCR in a clinically recovered patient.[16]
- See chapters 4.2.3 and 4.2.4 for information on inconclusive test results and for details on the NRC Respiratory Pathogens.

5.3.4. Infection prevention and control measures in case of home or hospital isolation

Contact precautions (and airborne precautions when performing aerosol generating procedures) will be applied to hospitalized patients with confirmed 2019-nCoV infection (for further details see chapter 4.3.4).

[16] Management of asymptomatic persons who are RT-PCR positive for MERS-CoV: Interim guidance. Geneva, Switzerland: World Health Organization; 2018. Licence: CC BY-NC-SA 3.0 IGO.

5.3.5. Identification and listing of contacts of confirmed cases by the regional health authorities

Once a case is confirmed, the health inspectors will identify contacts by asking about the activities of the case and the activities and roles of the people around the case since onset of illness.

All persons considered to have had significant exposure should be listed as contacts by the regional health authorities.

Efforts should be made to identify every listed contact and inform them of their contact status, what it means, the actions that will follow, and the importance of receiving early care if they develop symptoms. The contact should also be provided with preventive information.

5.3.5.1. Case definition close contact

A close contact defined by ECDC is:

- family members or people living in the same household;
- close (< 2m distance) or direct contact with the person e.g. health care or laboratory worker,
- direct exposure to body fluids or specimens including aerosol

A close contact defined by WHO is:

- Living in the same household as a nCoV patient
- Working together in close proximity or sharing the same classroom environment with a with nCoV patient
- Traveling together with nCoV patient in any kind of conveyance
- Health care associated exposure, including providing direct care for nCoV patients, working with health care workers infected with nCoV, visiting patients or staying in the same close environment of a nCoV patient.

This epidemiological link may have occurred within a 14-day period before or after the onset of illness in the case under consideration.

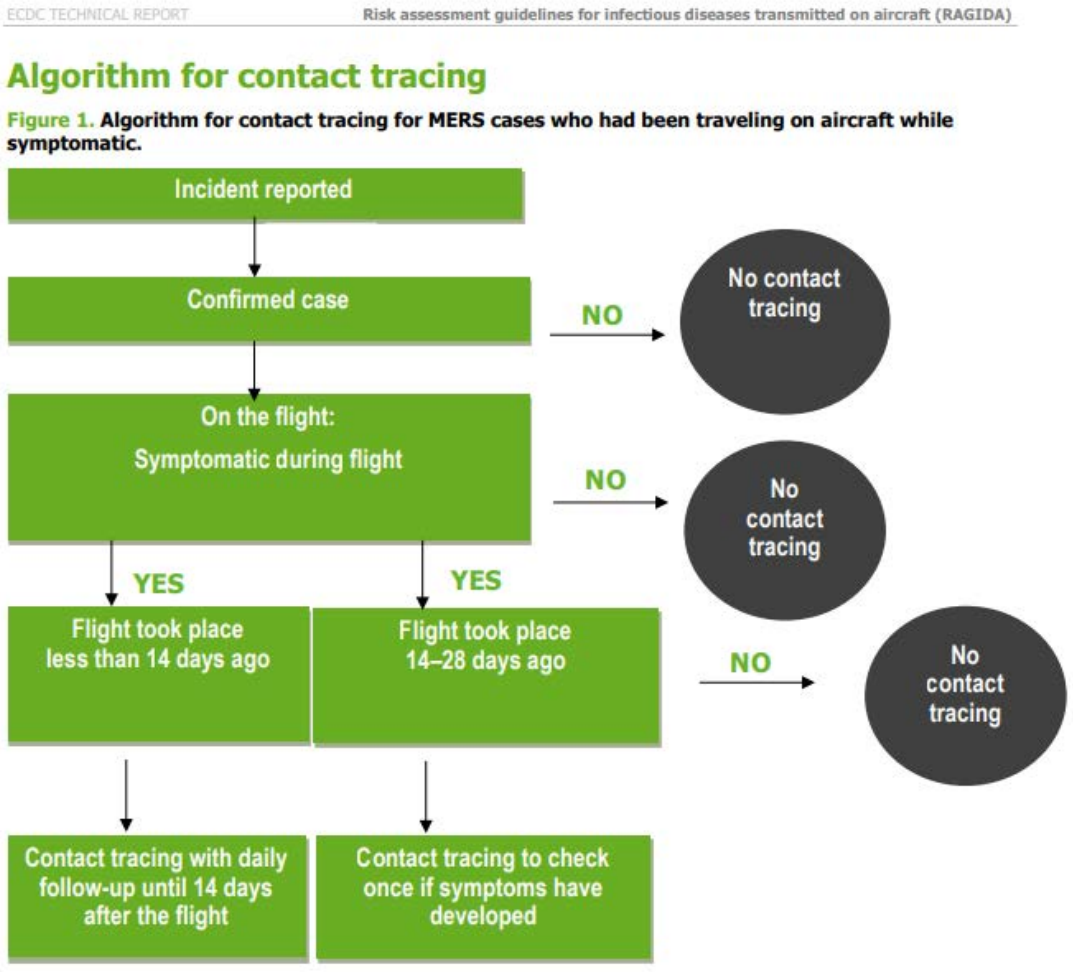
5.3.5.2. Contact tracing on flights or public transport

It is advisable for countries to trace contacts of confirmed 2019-nCoV cases on flights in accordance with the guidelines for SARS contact tracing in RaGIda[17], regardless of flight time.

- Flight attendants should follow the IATA guidelines for infection control.
- Captains should radio ahead to the destination airport, informing officials of a possible 2019-nCoV case on board.
- If a passenger is suspected of having 2019-nCoV infection during a flight, the potentially infectious passenger should be isolated and provided with a surgical face mask.
- Once the 2019-nCoV diagnosis is confirmed then contact tracing needs to be organized.
  - > Passengers should provide identification and contact details to the health authorities within 14 days of the flight (in order to facilitate contact tracing).

[17] European Centre for disease Prevention and Control. Risk assessment guidelines for infectious diseases transmitted on aircraft (RaGIda) - Influenza. Stockholm: ECDC; 2020

- Priority for contact tracing efforts should be given to:
  - passengers seated two rows in all directions of the index case
  - crew members serving the section of the aircraft where the index case was seated
  - persons who had close contact with the index case
    - passengers living in the same household as the case.
    - passengers having had >15 minutes of face-to-face contact with the case
    - passengers having had contact with respiratory secretions of the case
- Depending on the clinical presentation of the case during the flight and feasibility, extending the tracing of contacts beyond three rows to possibly include all passengers may be considered.
- If a crew member is the index case all passengers seated in the area served by the crew member during the flight should be regarded as contacts, as should the other members of the crew.



Source: European Centre for disease Prevention and Control. Risk assessment guidelines for infectious diseases transmitted on aircraft (RaGIda) - Influenza. Stockholm: ECDC; 2020

6. Follow-up of close contacts of a confirmed 2019-nCoV patient

The close contacts, listed as described in chapter 5.3.5, are followed-up according to their status.
A distinction is being made between:

- Asymptomatic close contact of confirmed 2019-nCoV case;
- Health care workers (HCW) with unprotected exposure to confirmed cases;
- Health care workers with protected exposure to confirmed cases

6.1. FOLLOW-UP OF ASYMPTOMATIC CLOSE CONTACTS OF CONFIRMED 2019-NCOV CASE AND OF UNPROTECTED HCW

6.1.1. Isolation measures

These close contacts who did not have appropriate protection during the contact with the confirmed case, should not be isolated.
There are no strict restrictions for work or social movement, but mass gathering events should be avoided.
The person should remain in Belgium and be reachable by phone until day 14 after last exposure (follow-up serology).

They should actively monitor the following symptoms until day 14 after the last exposure:

- twice daily temperature measurements (rectal or oral)
- be alert for symptoms: fever (38 °C oral/rectal) and/or cough
  (in immunocompromised persons diarrhoea may be the only sign)

The persons should actively be contacted daily by the health inspector or the treating physician.
If they develop one of the above symptoms, they should be treated as possible cases.

6.1.2. Biological sampling

No biological sampling is required as long as the close contact or unprotected HCW remains asymptomatic.[18]

6.2. FOLLOW-UP OF ASYMPTOMATIC PROTECTED HCW

HCW having provided healthcare while using the recommended PPE to a symptomatic person with confirmed MERS, are considered to be at “low but not zero risk” for infection, and therefore should be monitored.[19] Until specific information for 2019-nCoV becomes available, the same strategy will be applied for HCW who provided healthcare for symptomatic person with confirmed 2019-nCoV.

[18] Home care for patients with suspected novel coronavirus (nCoV) infection presenting with mild symptoms and management of contacts Interim guidance 20 January 2020
[19] https://www.cdc.gov/coronavirus/mers/hcp/monitoring-movement-guidance.html#table2

6.2.1. Isolation and monitoring

Protected HCW should not be isolated.
There are no restrictions for work or social movement.
The person should remain reachable by phone until day 14 after the last exposure.

Protected HCW should monitor the symptoms themselves until day 14 after the last exposure and contact the health inspector in case they develop symptoms:

- twice daily temperature measurements (rectal or oral)
- be alert for symptoms: fever (38 °C oral/rectal) and/or cough

and should from then on be treated as possible cases.

6.2.2. Biological sampling

No biological sampling is required as long as the protected HCW remains asymptomatic.

7. Epidemiological situation

From an international perspective : information on the novel coronavirus 2019-nCoV in China is regularly updated on ECDC's website (https://www.ecdc.europa.eu/en/novel-coronavirus-china) and WHO's website (https://www.who.int/emergencies/diseases/novel-coronavirus-2019).

8. Most recent version of the procedure

The most recent version of this procedure is published on the following webpage of Sciensano:
https://epidemio.wiv-isp.be/ID/Pages/2019-nCoV.aspx

Annex A Lab request form

REFERENTIECENTRUM VOOR RESPIRATOIRE PATHOGENEN

GELIEVE HET STAAL SAMEN MET DIT INGEVULD FORMULIER OP TE STUREN NAAR:

Professor Katrien Lagrou
UZ Leuven, Dienst Laboratoriumgeneeskunde,
Herestraat 49, B-3000 Leuven
Tel. 016/34.70.98-Fax. 016/34.79.31-Email: katrien.lagrou@uzleuven.be

Code Labo

***GEGEVENS OVER HET LABORATORIUM DAT HET STAAL OPSTUURT**

Naam klinisch bioloog: .....

Naam laboratorium: .....

Tel: ..... Fax: .....

Emailadres: .....

Naam+ RIZIVnr aanvragende arts: .....

.....

***PATIENTGEGEVENS OF STICKER**

Naam: .....

Geslacht: ❑ M ❑ V

Geboortedatum: .....

Rijksregisternr: .....

Straat+nr: .....

Postcode of woonplaats: .....

Nationaliteit: .....

Recent verblijf buitenland: ❑ ja ❑ neen

Zo ja, land of streek: .....

***GEGEVENS OVER HET STAAL**

Identificatienummer: .....

Afnamedatum: .....

❑ keelwisser ❑ sputum

❑ biopt (niet gefixeerd) ❑ BAL

❑ nasopharyngeale (flocked) swab

❑ nasopharyngeaal aspiraat

❑ CSV (*M. pneumoniae*) eiwitgehalte.....mg/dl
%lymphocyten ..... glucosegehalte.....mg/dl
Aantal cellen ❑0-5 ❑6-10 ❑11-49 ❑>50

❑ conjunctivale wisser (adenovirus)

❑ andere .....

❑ Resultaat Gram kleuring .....

❑ Resultaat kweek .....

ANDERE BELANGRIJKE GEGEVENS

Indien van toepassing, bvb mogelijke urgentie van analyse

***KLINISCHE GEGEVENS**

Datum begin symptomen:.....

Antibioticabehandeling voorbije 48h ❑ ja ❑ nee ❑ onbekend
als ja welk.....

Hospitalisatie ❑ ja ❑ nee
als ja : ❑ infectieziekten ❑ intensieve zorgen
❑ spoedgevallen ❑ pediatrie
❑ andere.....

RX pneumonie:	❑ ja	❑ nee	❑ onbekend
Koorts	❑ ja	❑ nee	
Hoest	❑ ja	❑ nee	
Conjunctivitis	❑ ja	❑ nee	
Kortademig	❑ ja	❑ nee	
Onderliggend longlijden	❑ ja preciseer.....		❑ nee
Immunodeficiënt	❑ ja preciseer.....		❑ nee
Hoofdpijn	❑ ja	❑ nee	
Spierpijn	❑ ja	❑ nee	
Meningitis	❑ ja	❑ nee	
Encephalitis	❑ ja	❑ nee	

Vermoeden van uitbraak: ❑ ja ❑ nee
❑ Index ❑ contactgeval
Naam index .....
Relatie tot index.....

AANGEVRAAGDE TESTEN NRC

PCR *M. pneumoniae*
5786 ❑ Bovenste luchtwegen *5788* ❑ CSV
5787 ❑ Aspiraat *5789* ❑ Longbiopt
5785 ❑ BAL

Respiratoir panel (enkel bij uitbraak) (inclusief SARS en MERS CoV)
5783 ❑ Bovenste luchtwegen *5782* ❑ BAL
5784 ❑ Aspiraat

PCR MERS CoV (enkel bij specifiek vermoeden MERS CoV)
2563 ❑ Bovenste luchtwegen
2528 ❑ Aspiraat
5603 ❑ BAL

***Verplicht in te vullen**

Aanvraagformulier respiratoire 21082019.doc

CENTRE DE RÉFÉRENCE POUR PATHOGÈNES RESPIRATORIES

FORMULAIRE A RENVOYER AVEC L'ÉCHANTILLON AU LABORATOIRE DE RÉFÉRENCE :

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Code labo

*IDENTIFICATION DU LABORATOIRE QUI ENVOIE L'ÉCHANTILLON

Biologiste responsable: .....
Nom du laboratoire : .....
Tél. : ..... Fax : .....
Adresse email: .....
Médecin prescripteur+ n° INAMI : .....
.....

*RENSEIGNEMENTS CONCERNANT LE PATIENT

Nom: .....
Sexe : ❑ H ❑ F
Date de naissance : .....
N° registre national : .....
Rue + n : .....
Code postal/Localité : .....
Nationalité : .....
Séjour récent à l'étranger : ❑ oui ❑ non
Si oui, pays ou région : .....

*RENSEIGNEMENTS CONCERNANT L'ÉCHANTILLON

Numéro d'identification :
Date de prélèvement : .....

- ❑ Frottis de gorge ❑ Expectoration
- ❑ Biopsie (non fixé) ❑ LBA
- ❑ Frottis nasopharagé (flocked swab)
- ❑ Aspiration nasopharyngé
- ❑ LCR (*M. pneumoniae*) : teneur en protéines .....mg/dl
  %lymphocytes ..... teneur en glucose .....mg/dl
  Nombre de cellules ❑0-5 ❑6-10 ❑11-49 ❑>50
- ❑ Frottis conjonctival (adenovirus)
- ❑ Autre : .....
- ❑ Résultat de la coloration de Gram .....
- ❑ Résultat de culture .....

AUTRES INFORMATIONS IMPORTANTES

Si d'application, par ex. urgence de l'analyse

*Indispensable

*INFORMATIONS CLINIQUES

Date de début des symptômes :.....
Antibiothérapie préalable (48h)
❑ oui ❑ non ❑ inconnu
Si oui, lesquels :.....
Hospitalisation ❑ oui ❑ non
Si oui : ❑ Maladies infectieuses ❑ Soins intensifs
❑ Urgence ❑ Pédiatrie
❑Autre : .....
Foyer RX : ❑ oui ❑ non ❑ inconnu
Fièvre ❑ oui ❑ non
Toux ❑ oui ❑ non
Conjonctivite ❑ oui ❑ non
Dyspnée ❑ oui ❑ non
Maladie pulmonaire sous-jacente
❑ oui préciser ..... ❑ non
Immunodéficience ❑ oui préciser ..... ❑ non
Céphalées ❑ oui ❑ non
Myalgie ❑ oui ❑ non
Méningite ❑ oui ❑ non
Encéphalite ❑ oui ❑ non
Suspicion d'épidémie : ❑ oui ❑ non
❑ Index ❑ contact d'un cas
Nom index .....
Relation à l'index .....

ANALYSES DEMANDÉES POUR LE CNR

PCR *M. pneumoniae*
5786 ❑ voies respiratoires supérieures *5788* ❑ LCR
5787 ❑ Aspiration *5789* ❑ biopsie pulm.
5785 ❑ LBA

Respiratoir panel (uniquement si épidémie) (inclus SARS et MERS CoV)
5783 ❑ voies respiratoires supérieures *5782* ❑ LBA
5784 ❑ Aspiration

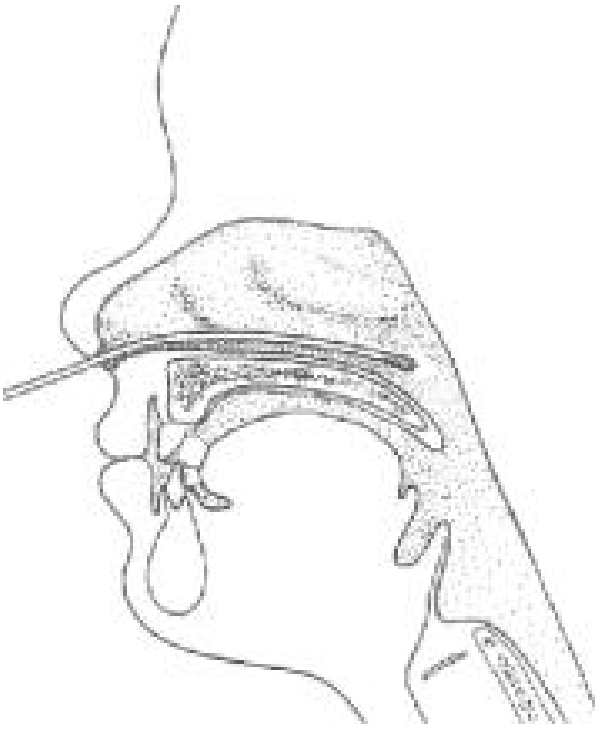
PCR MERS CoV (uniquement si suspicion spécifique de MERS CoV)
2563 ❑ voies respiratoires supérieures
2528 ❑ Aspiration
5603 ❑ LBA

formulaire de demande pathogènes respiratoires 2019.doc

Annex B Sampling procedures

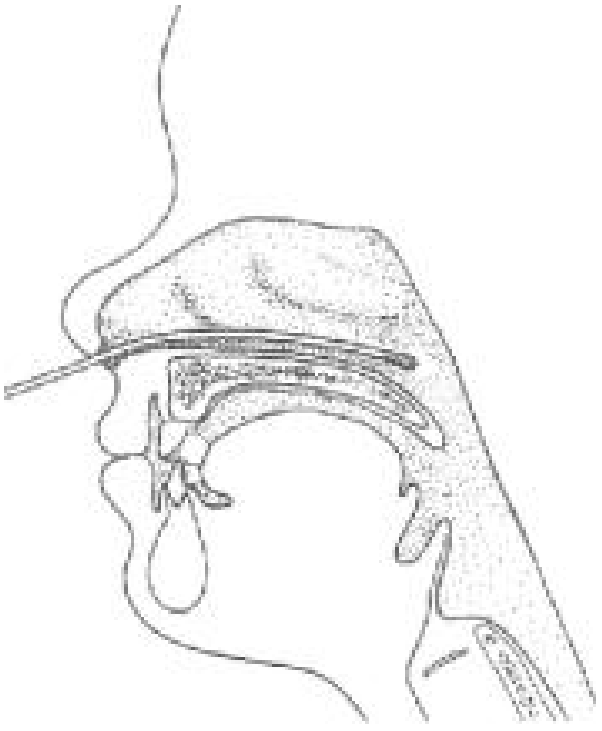
PROCÉDURE DE PRÉLÈVEMENT POUR LES FROTTIS NASOPHARYNGÉS

- Matériel: coton, dacron ou de préférence “flocked swabs” dans un milieu de transport universel ou de virus ;
- A l’aide d’un premier écouvillon prélever le plus possible de cellules en introduisant l’écouvillon profondément dans une narine et effectuer quelques mouvements de rotation. Procéder de même au niveau de l’autre narine.
- Mettre l’écouvillon dans le tube de transport et casser l’extrémité de la tige. Puis à l’aide d’un deuxième écouvillon, procéder de même au niveau des zones inflammatoires au fond de la gorge (amydales). Mettre l’écouvillon dans le tube contenant le milieu de transport et casser l’extrémité de la tige. Fermer de tube hermétiquement.
- Identifier l’échantillon:
  - Référence du patient ;
  - La date de prélèvement ;
  - Médecin: coordonnées du médecin qui a réalisé le prélèvement.
- Placer le sachet “minigrip” dans un emballage parfaitement hermétique
- Tous les échantillons doivent être conservés à 4°C avant l’envoi



HOE NASOFARYNGEALE STALEN NEMEN?

- Materiaal: katoen, dacron of liefst “flocked swabs” in een universeel- of virustransportmilieu
- Breng een eerste wattenstaafje diep in het neusgat en maak zoveel mogelijk cellen los door langs de binnenkant van een neusgat te schrapen. Ga met hetzelfde wattenstaafje op dezelfde manier te werk om een staal te nemen van het andere neusgat.
- Plaats het wattenstaafje in de tube met transportmilieu en breek het uiteinde van de steel af.
- Ga met het tweede wattenstaafje op dezelfde manier te werk om een staal te nemen van de ontstoken zones in de keel (amandelen, keelwand, etc.). Plaats het wattenstaafje in de tube met transportmilieu en breek het uiteinde van de steel af.
- Sluit het flesje hermetisch.
- Het staal identificeren:
    - Referentie van de patiënt;
    - Datum van staalname;
    - Arts: Coördinaten van de behandelende arts die het staal heeft afgenomen.
- Plaats de transporttube in een “Minigrip” zakje en sluit hermetisch
- In afwachting van verzending, bewaar de stalen in de koelkast (+4°C).



Annex C Questionnaire for patients with possible or confirmed 2019-nCoV infection

Clinical data

Hospital Reference: _____

Date of the notification____/____/____(dd/mm/yyyy)

Institution_____

Identification of the person notifying the case (name, function, e-mail, telephone)

_____

Identification of the patient

Sex ☐ M ☐ F

Date of birth (dd/mm/yyyy)_____/____/____or age (year if >=2, months if < 2years)

Country of residence: _____

The patient is health professional ☐ yes ☐ no unknown

Hospitalisation

Date of hospitalisation (dd/mm/yyyy) : ……/……../ ……. Referred

from other hospital/institution ☐ yes ☐ no

If referred, specify:

Signs and symptoms

Date of onset (dd/mm/yyyy) ____/____/____

Temperature >38°C ☐ yes ☐ no ☐ unknown

History of t° ☐ yes ☐ no ☐ unknown

Cough ☐ yes ☐ no ☐ unknown

Dyspnoea ☐ yes ☐ no ☐ unknown

ARDS ☐ yes ☐ no ☐ unknown

Other significant:

X-ray

Thoracic X-ray ☐ yes ☐ no

Infiltrate/pneumonia ☐ yes ☐ no

Severity at admission

ICU ☐ yes ☐ no

Mechanical ventilation ☐ yes ☐ no

Referred to other hospital ☐ yes ☐ no

If referred, specify:

Laboratory samples

Date of the sample (dd/mm/yyyy) …./…./….

Sent to reference laboratory ☐ UZ Leuven ☐ NRC Influenza at Sciensano ☐ no

First serum taken (acute phase) ☐ yes ☐ no date (dd/mm/yyyy) …./…./….

Second serum taken (convalescence) ☐ yes ☐ no date (dd/mm/yyyy) …./…./….

Epidemiological data

Exposure

Contact with a confirmed case in the 14 days before onset?

☐ yes ☐ no ☐ unknown

If yes, specify (country, date, event):

_____

_____

_____

Contact with animals in a foreign country in the 14 days before onset?

☐ yes ☐ no ☐ unknown

If yes, specify (country, date, event):

_____

_____

_____

History of travel in a foreign country in the 14 days before onset ☐ yes ☐ no

If yes, fill in the following table:

Country	Place	from dd/mm/yyyy	to dd/mm/yyyy

Flight coordinates at departure (for any flight in the last 14 days)

Airport	Company	Flight nb	Seat nb	Date	Time