**Nobel College of Health and Education Foundation Ltd**

**Nobel Hospital**

Sinamangal, Kathmandu

**A Protocol**

**for**

**Management of Suspected Coronavirus (nCoV) Infection**

1. **General:-**

This protocol will clarify for control and management of Coronavirus (nCov) infection is suspected.

1. **Responsibility and Authority:-**

The Medical Coordinator will be responsible to implement this policy and make amendments as necessary. He has authority to delegate responsibility as required and all staffs are expected to follow this policy.

1. **Disease Information:-**

Coronavirus are family of viruses that causes illness ranging from a cold to more severe diseases. Typically symptoms include a fever, fatigue, sore throat and dry cough and may later develop is to breathing difficulties. It is transmitted between animal to people. This novel coronavirous, currently named 2019 n-CoV found on 31 December 2019 in Wuhan, China, is a new strain that had not been previously identified in humans.

1. **Chain of Plan Activation**

**P1:** **Less than 2 suspected cases within 24 hours-** Activities to be controlled by Emergency team

**P2: More than 2 suspected cases presenting within 24 hours**- Activation of disaster plan and activities controlled by HICS

**P3: More than 10 suspected cases presenting within 24 hours-** External assistance to be activated by HICS

1. **General Guideline for early warning and treatment of n-CoV infection**
2. Screening & early detection
3. Infection Prevention and Universal Precaution
4. Early confirmation and diagnosis
5. Prompt isolation and transfer to ward in a safe manner
6. Initiate of Treatment
7. Tracing of contacts and isolation
8. Continue surveillance and monitoring till outbreak is over
9. Proper recording and Reporting
10. Debriefing
11. **Activities:-** 
    1. **Screening and Early Detection**
12. Initial screening triage process should be followed (P1 and P2 at in front of ED and P3 at outside of OPD parking area)
13. Secondary triage should be done in the ward
14. Patient screening at the entry point of ED/OPD.
15. Identify the ARI with history of fever measured > 38°C (100.4°F) and cough, sore throat with onset.
16. Has the patient been in close contact with a care of nCoV infections?
17. Patients work or visited at Wuhan China?
18. Is the patient HCWs, who has been working in Wuhan China?
    1. **Infection Prevention and Universal Precautions**
19. Staff should use at least basic level of PPE manning at triage/ screening station.
20. Staff at isolation zones should also be using a level of PPE, and cnsumerate universal precautions.
21. Trained and educate staff towards PPE and universal precautions.
22. Encourage to respiratory hygiene.
23. HCWs must protect themselves and patient against contamination and properly decontaminate and dispose of used instrument etc after use.

* To control the spread of infection we must
* Keep ourselves clean
* Keep the hospital clean
* Wear PPE
* Handle laboratory specimens carefully
* Collect and dispose used materials and rubbish properly.

1. **Hand washing**

**All HCWs must wash their hands with soap and water especially:**

* On arrived and before leaving the workplace
* Before and after eating, drinking
* Between examining patients
* Before and after performing a procedures on a patients
* Before and after collecting specimens.
  + 1. **Application of standard precaution for all patient**

1. Use of PPE
2. Proper hand hygiene
3. Proper waste disposal
4. Ensure environmental cleaning and disinfection
   * 1. **Respiratory Isolation**
5. Patient to be admitted to private rooms, or isolation rooms *(activate P1)* if less than 2 patients and in General ward if more than 2 patients *(activate P3).*
6. Private room or general ward should be natural ventilated with 160L/second/patient air flow and negative air pressure.
7. Teach the patient and visitors on respiratory hygiene and covered mouth when coughing and sneezing.
8. Limit the HCWs and visitors
9. Record the number of staff and visitor entering the patient’s room
10. Use a medical face mask.
11. Use gloves
12. Use eye/facial protection (eg. goggles or face shield)
    * 1. **Infection Prevention**
13. Applied universal precaution and use PPE in every step.
14. All reuse instruments should be disinfected immediately with 70% ethyl alcohol.
15. All single use instrument and equipment must be disposed in a separate rubbish bucket, immediately after decontamination.
16. Dry and soiled linen is collected in a bin, which is kept covered at all times. It is then transported while covered to the laundry, where it is soaked (in phenol) then wash for 15-20 minutes with hot water.
17. When the floor is contaminated with blood or body fluids, it must first be decontaminated by covering the spill with an absorbent cloth and flooding the area with 0.5% chlorine and left for 10 minutes before processing.
18. After discharge of patient, bed, matrix, pillow should be disinfected with 0.5% chlorine solution and then clean with soap and water.
19. Room/ ward fumigation should be done immediately after discharge of the infected patient.
20. Each patient should use their own bed pan, urinals, sputum mug. Thoroughly clean with soap and water after every use and left to air dry.
21. Bath, toilets should clean with chlorine solution then soap and water immediately after use.
22. Strictly follow hospital infection control protocol.
    * 1. **Collection and Handling of Lab Specimen**
23. Always use PPE when collecting specimen (blood, throat swab, stool, urine etc)
24. Carefully put the specimen into the specimen container and sealed promptly to avoid spills as splashes.
25. Places- sealed specimen upright into collection tray.
26. Sample must be transported carefully in tightly secured containers,
27. Specimen bottles / containers should be carried in trays that keep them upright.
28. Mouth pippeting of substances is forbidden.
29. Proper documentation should be made (Name, Age, Sex, address, patient ID etc)
30. Early Notification to lab / referral lab and early reporting system should be followed.
31. All specimen (suspicious of nCoV infection) should be referred to central lab (NHPC- Teku) for test.

**6.2.5 Disposal of Specimen**

1. Specimens must be placed in a designated leak proof clinical waste disposal bags.
2. Disinfection with 0.5% chlorine solution and autoclave before disposal.
3. Always use PPE when disposal of specimen.
   * 1. **Handling Dead Bodies**

The nursing staff covers and roll the body in a morgue sheat and tie securely the label with patient's Name, age, sex, ID No., and the body transported to the mortuary on trolley from back door of Block A.

1. **Prompt isolation and transfer to ward in a safe manner**
2. If suspected cases or patient fails screening test should immediately transfer to isolation room or ward in a safe manner.
3. **Early confirmation and diagnosis**
4. In isolation ward, rapid diagnostic test should be performed or collect specimen and send to the lab to confirm disease
5. Physician should be consulted before initiating treatment.
6. Treatment should be instituted as early as possible
7. Further test and investigation should be added if required
8. **Tracing of contacts**
9. After definite management of patient, contact tracing must begin
10. Interview and assess history from patient’s next-of- kin and colleagues
11. All contacts will need to be traced and all contacts followed up to ensure complete tracing
12. Contacts, once traced, should be screened for evidence of disease and mandatary quarantine if frequent temperature and symptoms of ARI
13. If high risk incident occurs to the HCWs during care of the patient, immediately reporting to the EDSC and hospital administration with incident report. The administration should take prompt action for needful management.
14. **Continue surveillance and monitoring till outbreak is over**
15. Continue surveillance on the continue prevalence of the disease need to be carried out, if no new cases at least twice incubation period from the date of last patient diagnosed and the outbreak can be considered to be over.
16. **Proper recording and Reporting**
17. All the record of the patients, events should be documented and reporting to the Hub (CSH), EDCD and HEOC periodically.
18. **Debriefing**

Hot debriefing should be carried out immediately the disaster is over and cold debriefing after 2 weeks of the disaster is over.

**Hospital Capacity**

Total Bed - 100

ICU bed - 8

Isolation Cabin - 2

Isolation ward - 1 (6-15 bed)

Ventilator - 3

# **Contact of Epidemic Disaster Surveillance Committee (EDSC)**

|  |  |  |
| --- | --- | --- |
| **Position** | **Name** | **Phone Number** |
| Hospital Manager | Krishna Bdr Nepali | 9843102920 |
| OT Incharge | Asodha Panchkoti | 9860365814 |
| MDGP | Dr Anu Kushwaha | 9841315359 |
| In-charge MO | Dr. Nilesh Kumar Mishra | 9813508757 |
| Supervisor/Ward In-charge | Rubina Bajracharya | 9867244368 |
| ER In-charge | Nageswor Yadav | 9841287457 |
| OPD In-charge | Sitaram Nagarkoti | 9841513081 |
| Communication Officer | Nidhi Bajimaya | 9843435686 |
| HK In-Charge | Dhiraj Niraula | 9819000334 |
| Driver | Kapil Subedi | 9841919051 |
| HOD Nursing (Nobel College) | Surya Devi Bajracharya | 9841199278 |

**Flow chart for screening and management of suspected coronavirus (nCoV) infection**

**Patient Entry**

**OPD**

**Emergency**

**Screening coronavirus infections suspected**

* Cold, cough for 10 days
* Temp >38°C
* Apply IP and PPE

Early warning and

Notification to EDSC

Follow Algorithm chart published by EDCD

Hospital Admin

Admission to

Pvt. cabin- if single case

Isolation ward (GW) - if >2 cases

EDCD / HEOC HUB

Lab Investigation

Specimen collection

* Blood and Others
* Throat swab

nCoV Negative

nCoV Positive

Cont. Reporting

Notification to

EDCD / HEOC/ HUB

Transfer to the patient in common ward for further evaluation and treatment

Further evaluation and treatment in isolation room

## Epidemic Disaster Triage category

|  |  |  |
| --- | --- | --- |
| **Triage categories:** | | |
| **Category** | **Classification** | **Treatment area** |
| **Red** | Immediate care  (life in danger) | ER RED AREA |
| **Yellow** | Urgent care  (**Serious, but life not in danger**) | ER YELLOW AREA |
| **Green** | Minor care (W**alking wounded)**  **(cuts and bruises)** | OPD GREEN AREA |
| **Black** | Dead /Hopeless | MORGUE/NEAR MORGUE |

## P1: and P2: Triage Area

|  |
| --- |
| Gate 3  **TRIAGE**  G  A  T  E  4  G  A  T  E  2  **YELLOW**  G  A  T  E  1  E  N  T  R  A  N  C  E  **Passage**  **RED** |

## Triage and Treatment Area during Epidemic Disaster (P3)

**OPD BLOCK**

**WARD AREA**

**Blood Bank**

BLACK AREA

Gate I ENTRY

Parking Area

Primary Triage

Secondary Triage

**GREEN AREA**

**YELLOW AREA**

**RED**

**AREA**