



Zhemgang Hospital Preparedness and Response Plan for Outbreak of COVID-19

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1) BACKGROUND

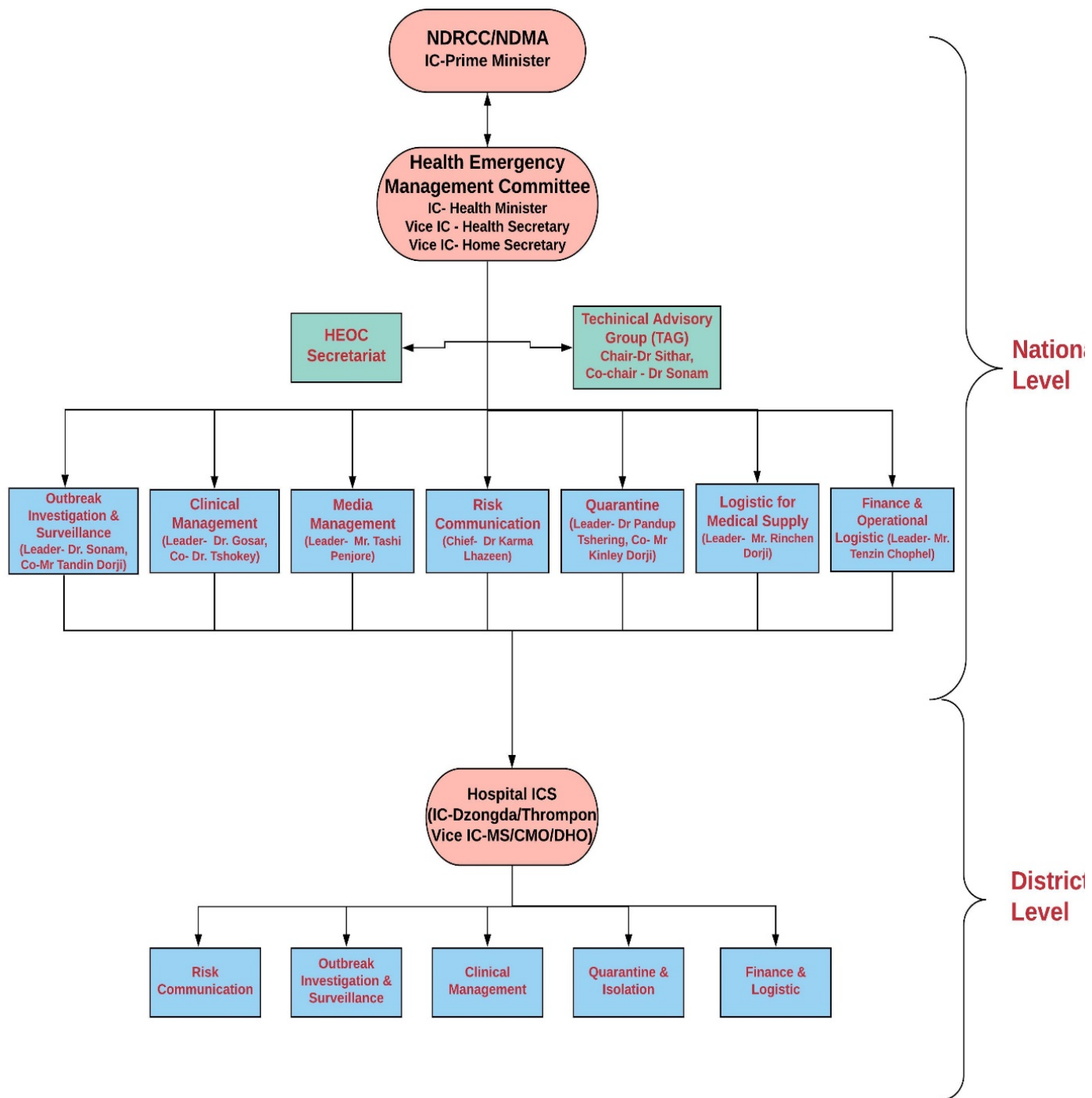
Coronavirus is a large family virus causing respiratory illness from common cold to more severe illness similar to novel MERS-CoV detected in 2012 in Saudi Arabia and SARS-CoV in China in 2002. Coronavirus disease 2019 (COVID 19) is an infectious disease caused by SARS-COV2, a new strain of corona virus. The novel corona virus (COVID-19) was first detected from the outbreak of unexplained viral pneumonia in Wuhan city, Hubei Province in China and reported to the WHO China Country Office on 31st December 2019. The common signs and symptoms are fever, cough, sore throat and shortness of breath and breathing difficulties. However, in some cases, it manifests as severe infections leading to pneumonia, severe acute respiratory syndrome, kidney failure and even death.

Initially, many patients from the outbreak epicenter, Wuhan city, China reportedly had some epidemiological link to a large seafood and animal market, suggesting spillover of the virus from animal to human. However, with the evolution of the disease epidemic, it is being recently reported that increased number of confirmed cases having no exposure to animal markets, indicating person-to-person transmission.

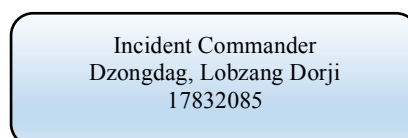
In order to mount effective and efficient response to COVID-19 in the country, the National Preparedness and Response Plan (NPRP) for COVID-19 is prepared with the objective to enhance the health sector's capacity to enhance surveillance, detect, control and prevent, response, investigate and recover from COVID-19 outbreak in the country. The plan shall be reviewed and updated as and when required by the Technical Advisory Group (TAG) for COVID-19, Ministry of Health.

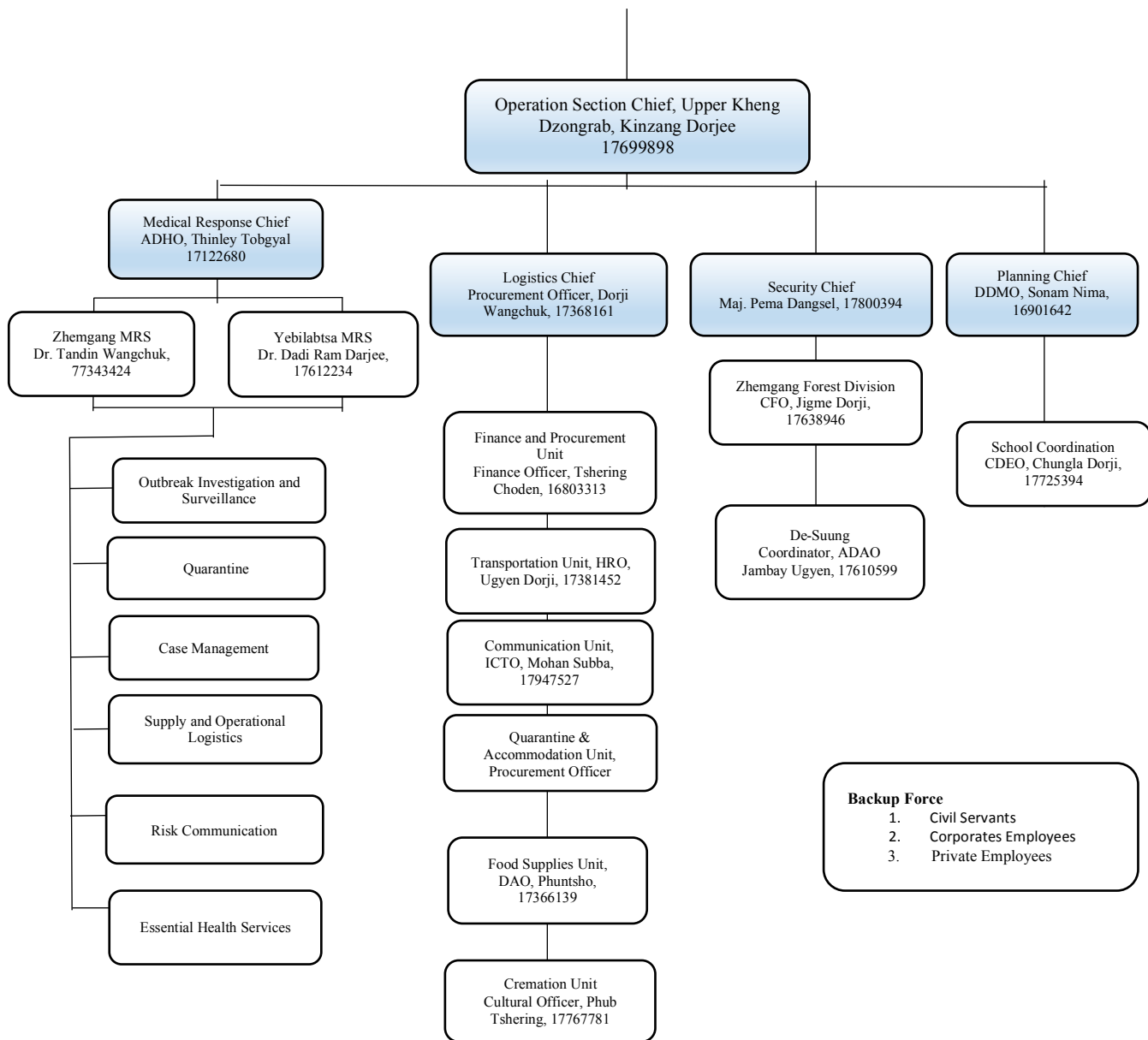
This NPRP is linked and aligned to the Health Emergency and Disaster Contingency Plan 2016 and National Disaster Management Act 2013. All the district Hospitals also have Public Health contingency plans which will be activated depending on the types of emergency.

**2) NATIONAL LEVEL TO DISTRICT LEVEL COMMAND AND COORDINATION
SYSTEM.**

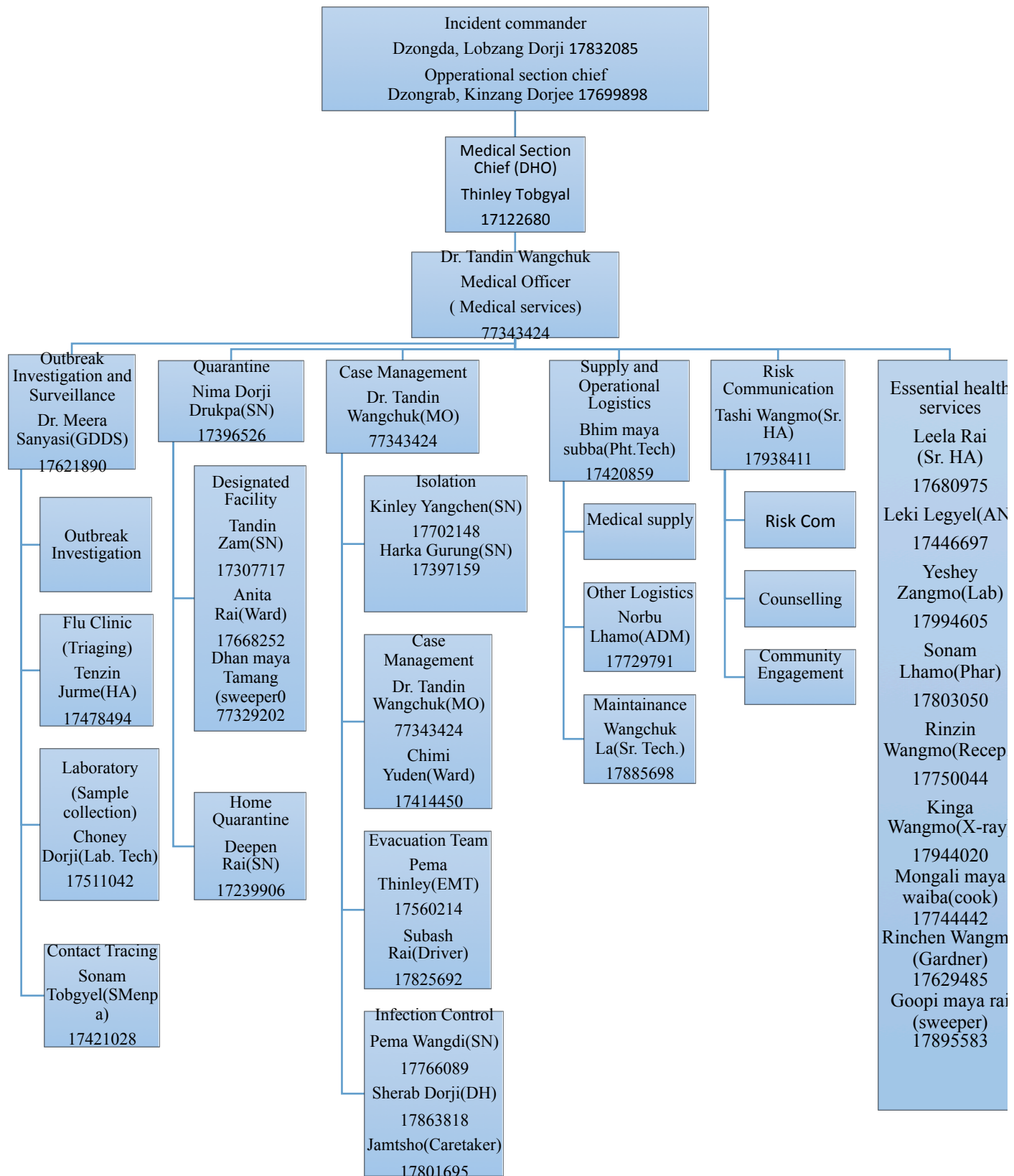


3) DZONGKHAG INCIDENT COMMAND SYSTEM- UPPER KHENG





4) Zhemgang Hospital incident command system (ZHICS).



5) Term of reference for ZHICS.

5.1) Outbreak Investigation & Surveillance:

1) Dr. Meera sanyasi (GDDS), Team leader- 17621890

Team Composition:

2) Choney Dorji (Lab.Tech), sample collection- 17511042

3) Tenzin Jurme (HA), Flu clinic(Triaging)- 17478494/77978494

4) Sonam Tobgay (Menpa), Contact Tracing- 17421028

5) Royal Bhutan Police, contact tracing in suspected/suspicious cases

6) De-Suung.

Terms of Reference:

- ✓ Carry out the investigation of all the cases fulfilling case definition for suspected case
- ✓ Carry out the contact tracing of all close contact of COVID-19 confirmed case
- ✓ Active case findings from the community/ locality/hospital from the where the confirmed cases were detected.
- ✓ Sample collection, packaging and transport of the suspected cases for laboratory confirmation
- ✓ Symptomatic screening of all the incoming personnel from ground.

5.2) SURVILLANCE.

Enhance existing National Early Warning Alert & Response and Surveillance (NEWARS) by Royal Center for Disease Control (RCDC)

Enhance existing Influenza-Like Illness (ILI) and Severe Acute Respiratory Infection (SARI) at the Points of Entry (PoEs), district hospitals, and regional and national referral hospitals

1 SURVILLANCE CASE DEFINATION:

SURVEILLANCE CASE DEFINITIONS
FOR COVID-19
8TH ed
MINISTRY OF HEALTH

SUSPECTED CASE

- a) Any individual with fever OR signs/symptoms of a lower respiratory tract illness (e.g., cough or shortness of breath) OR loss of smell/taste OR gastrointestinal symptoms (diarrhea, or vomiting) with or without requiring hospitalization AND a travel history to affected places/countries within last 21 days of onset of symptoms
- b) Any individual including health worker with fever OR signs/symptoms of a lower respiratory tract illness (e.g., cough or shortness of breath) OR loss of smell/taste OR gastrointestinal symptoms (diarrhea, or vomiting) with or without requiring hospitalization AND close contact of confirmed case/s or travelers from affected places/countries within last 21 days of onset of symptoms
- c) A patient with severe acute respiratory illness (fever or history of fever within last 10 days and at least one signs/symptoms of respiratory disease e.g., cough, shortness breath) AND requiring hospitalization AND in the absence of an alternative diagnosis that fully explains the clinical presentation
- d) Health workers or any individual working at the border areas (DeSuups, foresters, drivers ferrying goods & passengers, armed personnel, COVID Task Force members and other volunteers) with fever AND one or more signs and symptoms such as cough, unexplained fatigue, loss of smell/taste, shortness of breath, any gastrointestinal symptoms (diarrhoea, or vomiting) with or without requiring hospitalization

CONFIRMED CASE

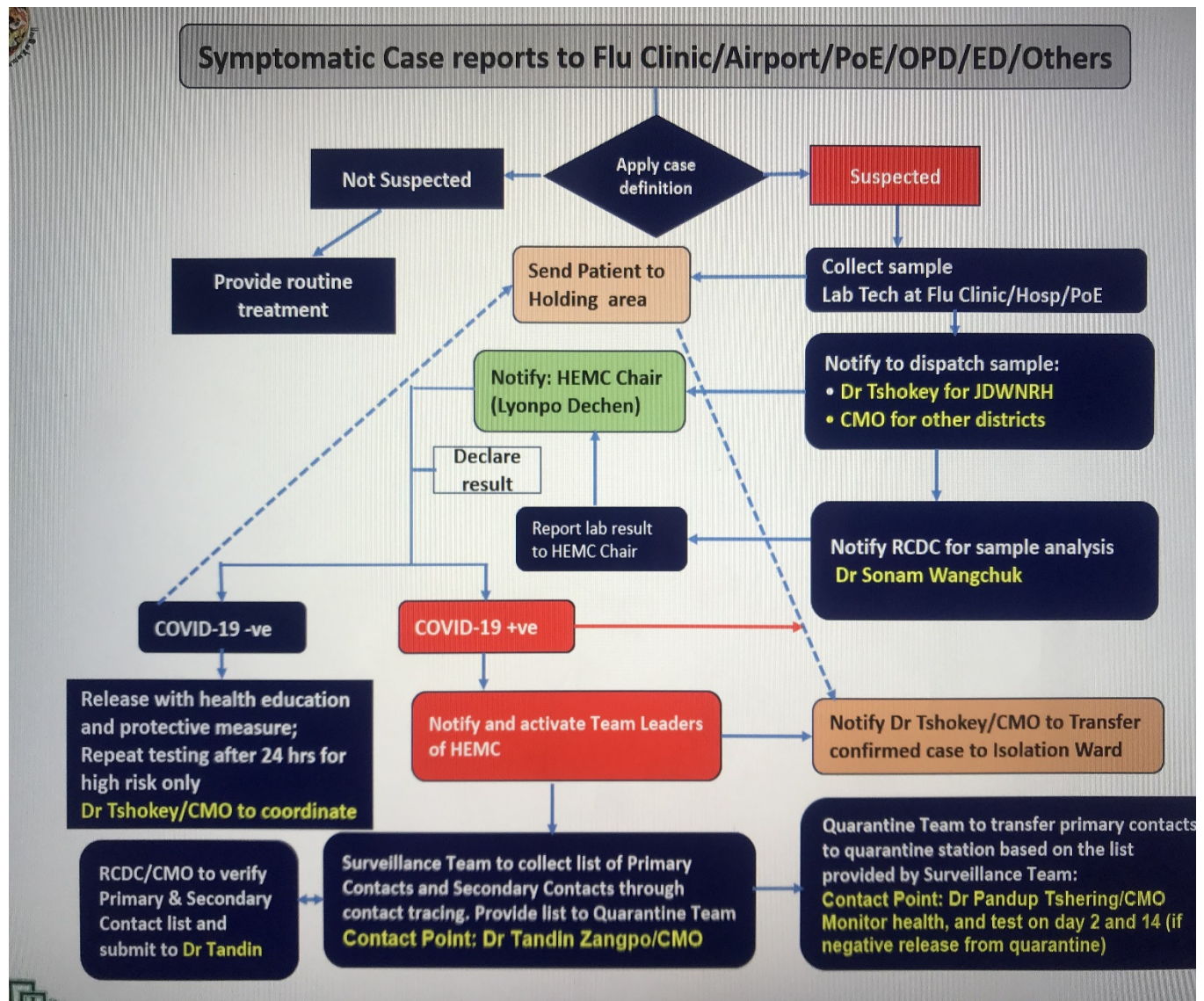
- a) Any suspected case as defined above with laboratory confirmation by Real Time PCR assay

Updated as of 12th May 2020

*** CASE DEFINITION FOR COVID-19 KEEPS ON CHANGING AND MAY NEED TO

UPDATE AT A DAILY BASIS AS PER WORLD HEALTH ORGANIZATION (WHO) ***

5.3) SURVEILLANCE AND QUARANTINE COORDINATION PROTOCOL



5.4)OUTBREAK RESPONSE

AS SOON AS THE COVID-19 INFECTION IS CONFIRMED BY LABORATORY TESTING BY THE RCDC, THE NATIONAL RAPID RESPONSE TEAM (NRRT) AND DISTRICT RAPID RESPONSE TEAM (DRRT) FROM THE AFFECTED DISTRICT(S) SHALL BE IMMEDIATELY ACTIVATED UPON THE COMMAND OF HEMC.

OUTBREAK INVESTIGATION TEAM

The suspect case investigation will be carried out using the “*Case investigation and sample collection form*” at the PoEs/Hospitals.

The RRTs shall conduct investigation as follows, regardless of the number of cases:

CASE INVESTIGATION

Any person fulfilling the surveillance case definition will be subjected to investigation. The case investigation and sample collection form for COVID-19, shall be used for this.

5.5) Laboratory

Currently Royal Centre for Disease Control (RCDC), Phuentsholing and Mongar Hospital has the capacity (BSL-II) to do this test in Bhutan. It takes about 6-8 hrs. from the time the sample reaches the RCDC to get the results. Real-Time Reverse Transcription- Polymerase Chain Reaction (rRT-PCR) is done for the detection of COVID-19.

Job Responsibilities

- ❖ Prioritize emergency sample testing
- ❖ Coordinate RCDC Focal.
- ❖ Sample collection and shipment to RCDC
- ❖ Involve in rapid response team.
- ❖ Contact medical store in-charge for stock piling of reagents and other supplies

Assign at least one laboratory technician on duty all-round the clock

Note: Refer Guidelines Sample Collection and Transportation.

5.6) Contact Tracing

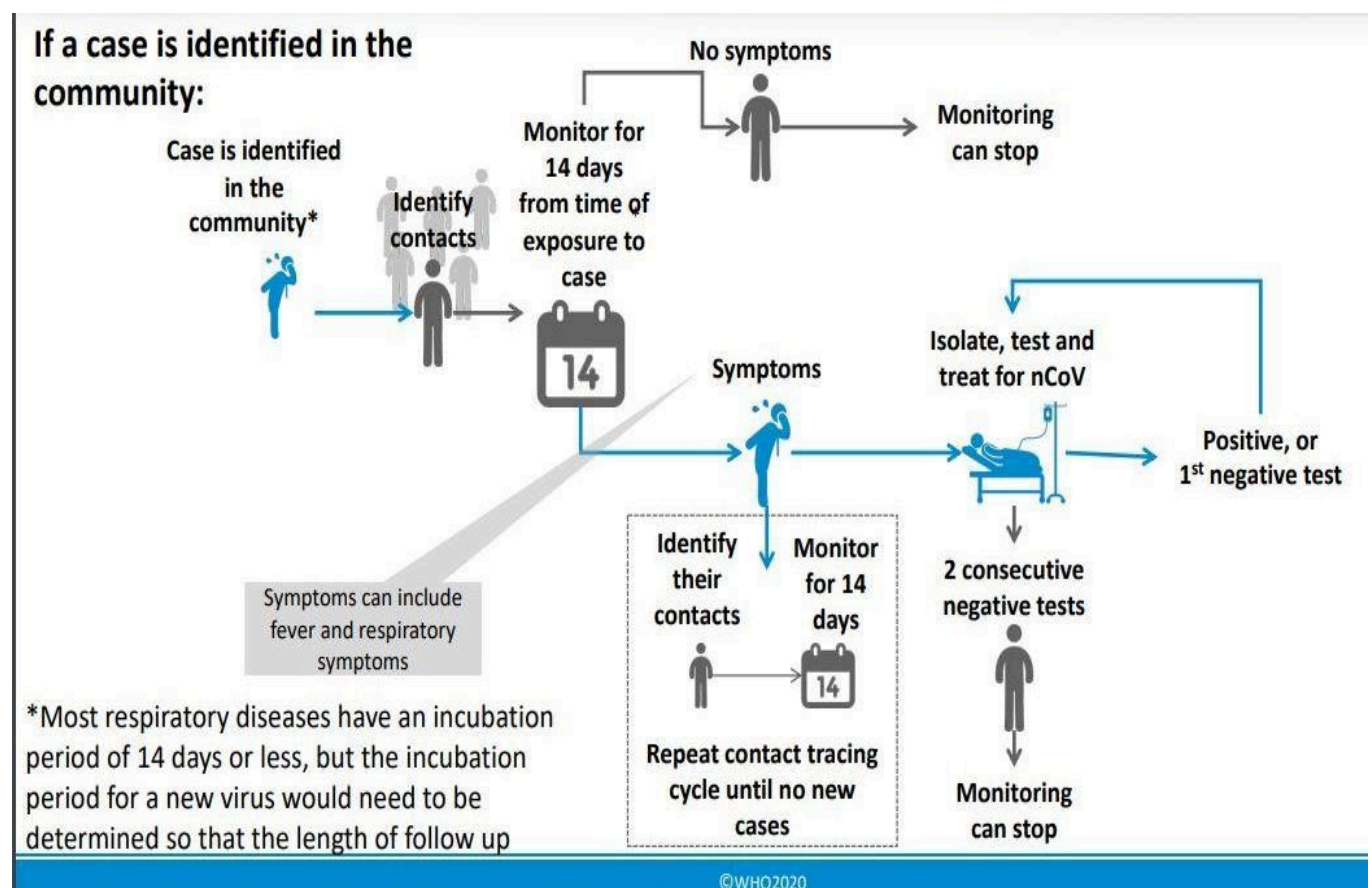
Contact tracing is done for active case finding in order to reduce transmission in the community. Contact tracing shall be done for all close contacts of the confirmed case and samples shall be collected and tested as for suspected cases. The Contact Tracing form shall be used for this.

Note: Refer Primary, Secondary contact tracing form, Case Investigation Form

CONTACTS OF CONFIRMED CASES IN OPD:

- identify and list contacts
- monitor the case for 14 days
 - symptomatic: isolate, test and treat for COVID-19
 - asymptomatic: stop monitoring

Contact tracing and follow-up as per WHO guideline if case is identified in community/OPD.



CONTACTS OF CONFIRMED CASE IN HOSPITALIZED PATIENTS

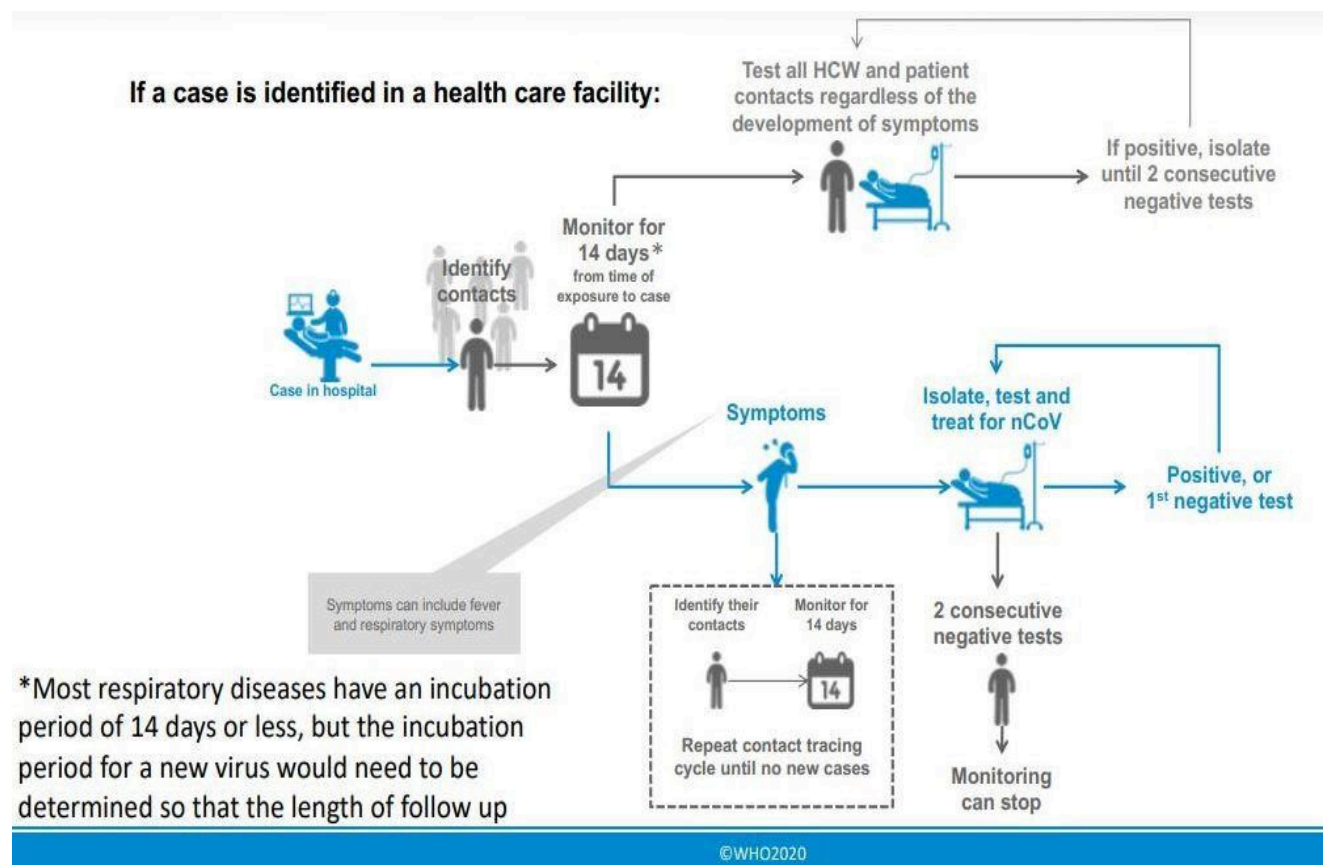
- identify and list contacts
- monitor the case for 14 days
 - test all healthcare workers and patient contacts regardless of the symptoms
 - symptomatic: isolate, test and treat for COVID-19

Contact tracing and follow-up as per WHO guideline if case is identified in the hospital

Active case finding:

Active case finding will be conducted in the following:

- The community/locality from where the confirmed cases were detected for a period of 10 days.
- The hospital where confirmed cases have been admitted for period of 10 days



- ? Transportation vehicle identified for outbreak investigation & surveillance.**
- ? Transportation vehicle identified sample collection and transportation
-ambulance & utility vehicle(yebilaptsa)**
- ? Transportation vehicle identified for contact tracing.**

6) QUARANTINE:

1. Definition:

Quarantine is a public health measure, which limits the movement of, or separate an individual who may have been exposed to an infectious disease from those who have not, to prevent the spread of the disease, and to see if s/he become ill to provide necessary medical support.

2. Objective:

The purpose of the quarantine is to keep an individual under observation for signs/symptoms of COVID-19 infection. It is also to provide necessary medical support, and to prevent the spread of the disease to his/her immediate family members, friends/colleagues or to the community as he/she is assumed to be exposed to the infection.

3. Legal provision:

During the emergency, as per Article 33 (2) of the Constitution of Kingdom of Bhutan, 2008, the Fundamental Rights granted under Article 7 (2), (3), (5), (12) and (19) shall be suspended as per Article 33 (7). Any individuals not complying and failing to cooperate shall be liable for the offence of Criminal Nuisance as per the Section 410 and for the offence of Obstruction of Public Service as per the Section 424 of the Penal Code (Amendment 2011).

Designated quarantine Facility Identified- Old Tama school campus after task force review.

Bed Capacity-

Back up quarantine facility- ECB building.

Bed capacity-

6.1) TEAM COMPOSITION:

- 1) Nima Dorji Drukpa (SN) 17396526
- 2) Tandin Zam (SN) 17307717
- 3) Anita Rai (ward girl) 17668252
- 4) Dhan Maya Tamang (Wet sweeper) 77329202

HOME QUARENTINE.

- 1) Deepen Rai (SN) 17239906

? Transportation Vehicle for quarantine and Food supply for quarantine and

isolation.

RESPONSIBILITY:

- 1) Monitor the clinical status(temperature) of people quarantined
- 2) If suspected of COVID-19 inform operation officer for transfer to isolation.
- 3) Put in place all the medical facilities required for quarantine.
- 4) Report all the incidences to the operation officer.

ROYAL BHUTAN POLICE:

- 1) Tshering Phuntsho 17633465
- 2) Jigme Zangpo
- 3) Rinchen Durba

DE-SSUNG:

6.2) DESIGNATED QUARENTINE FACILITY:

Criteria:

Any individual/traveler entering the country or who have history of close contact (contact within 1meter distance for a minimum of 15 minutes) with the confirmed COVID-19 case shall be put under quarantine at the designated facility/hotel.

Duration of quarantine:

The duration of the quarantine shall be 21 days from the date of last contact with the confirmed case or from the day of arrival into the country.

Testing:

Rapid diagnostic test (RDT) shall be carried out on the 22nd day and if test result is negative, the individual will be released with a quarantine completion certificate, test result, and health education. If RDT result is positive, then RT-PCR test will be carried out for confirmation. If the RT-PCR result is negative for two consecutive tests, tested 24 hours apart, then the individual will be released with quarantine completion certificate, test result and health education.

However, if the result is confirmed positive by the RT-PCR, the individual will be moved to isolation ward for further management. Contact your local area quarantine management team

or call 112 for ambulance to transport the individual to the isolation.

Quarantine measures at PoE

- All close contacts of a suspected case shall be quarantined in the designated place at PoE until the laboratory test results are available
 - If suspected case tests positive, quarantine for the close contacts shall be extended for 21 days in the designated place
 - If suspected case tests negative, quarantine for the close contacts shall be terminated and followed up for 7 days from the day of release
- a. Quarantine measures at schools, colleges and other similar institutions (monastics, nunnery, etc)
- If a case is confirmed in any of these institutions, all the close contacts of this case shall be quarantined in the institution only for 21 days from the date of confirmation of a positive case.
 - If a case is confirmed in a day-school or college, the school or college shall be closed immediately, and their close contacts shall be quarantined at their home for 21 days from the date of confirmation of a positive case.
- b. Quarantine measures for a case confirmed at a community
- If multiple cases are confirmed from community or communities, and the extent of the outbreak large, the whole of community or communities shall be placed under quarantine (lock down) for 21 days from the last confirmed case.

For more details on quarantine, refer “*Protocol for Quarantining people for COVID-19*” in 4th edition.

FOOD POINT.

7) CASE MANAGEMENT.

Isolate the suspected individual at Isolation Room 1 until the lab results are available. If the sample from the suspected case tests positive, the isolation period shall be extended and managed as a COVID-19 case in isolation ward. Severe confirmed cases from the hospitals shall be evacuated to JDWNRH if needed intensive care

The confirmed cases shall be managed as per the Clinical Management Guideline **(Refer: “Guideline on the Clinical management of severe acute respiratory infection when novel coronavirus (COVID-19) infection is suspected”, 3rd Edition).**

V13.2 Clinical case management protocol for confirmed COVID 19, version 13 updated on 27 May 2020 JDWNRH.

7.1) TEAM COMPOSITION:

TEAM A RRTs:

- 1) Dr. Tandin Wangchuk (GDMO), Team Leader 77343424
- 2) Devi Maya Siwakoti (HA) Buli, case management 17803700
- 3) Kinley Yangchen (SN) case management and monitoring 17702148
- 4) Harka Gurung (SN) case management and monitoring 17397159
- 5) Chimi Yuden (Ward Girl) 17414450

TEAM B RRTs: FROM YEBILAP TSA

- 1) Dr. Dadi Ram Darjee (GDMO) Team Leader 17612234
- 2) Karma Yangzom (HA) Gomphu 17387801
- 3) Karsang Dawa (SN) 17251747
- 4) Kelzang (SN) 17450367
- 5) Hemlal Trimshina (Ward Boy)
- 6) Jampel Lhendup (sweeper) 17841001

TEAM C RRTs: FROM PANBANG

- 1) Thinley Dorji Sr. (SN) Team Leader 17761581
- 2) Dr. Tenzin Lhamo (GDMO) 17642455
- 3) Tshering Yangdon (SN) 17282273
- 4) Thinley Dorji Jr. (SN) 17561823
- 5) Leki Tshering (Ward Boy) 77247796

ROYAL BHUTAN POLICE:

- 1) Dorji 77466783
- 2) Ugyen Tashi

DESUUNG:**RESPONSIBILITIES:**

- Lead the Isolation Unit.
- Receive all the suspected case.
- Both patient and staff must confine to identified area or place in the Isolation.
- Identify dropping and pickup point for goods, foods and wastes.
- Maintain the detailed record of the isolated patients
- Adhere strictly to the IC&MWM (Infection Control and Medical Waste Management) guideline.
- Establish good transmission-based PPE use.
- Submit status of the cases to the DHRRT chairperson by isolation team

FOOD POINT.

8) ISOLATION WARD.

Designated Area- doctors quarter.

bed capacity- 2

Donning & Doffing room- 1

Staff Room- 1

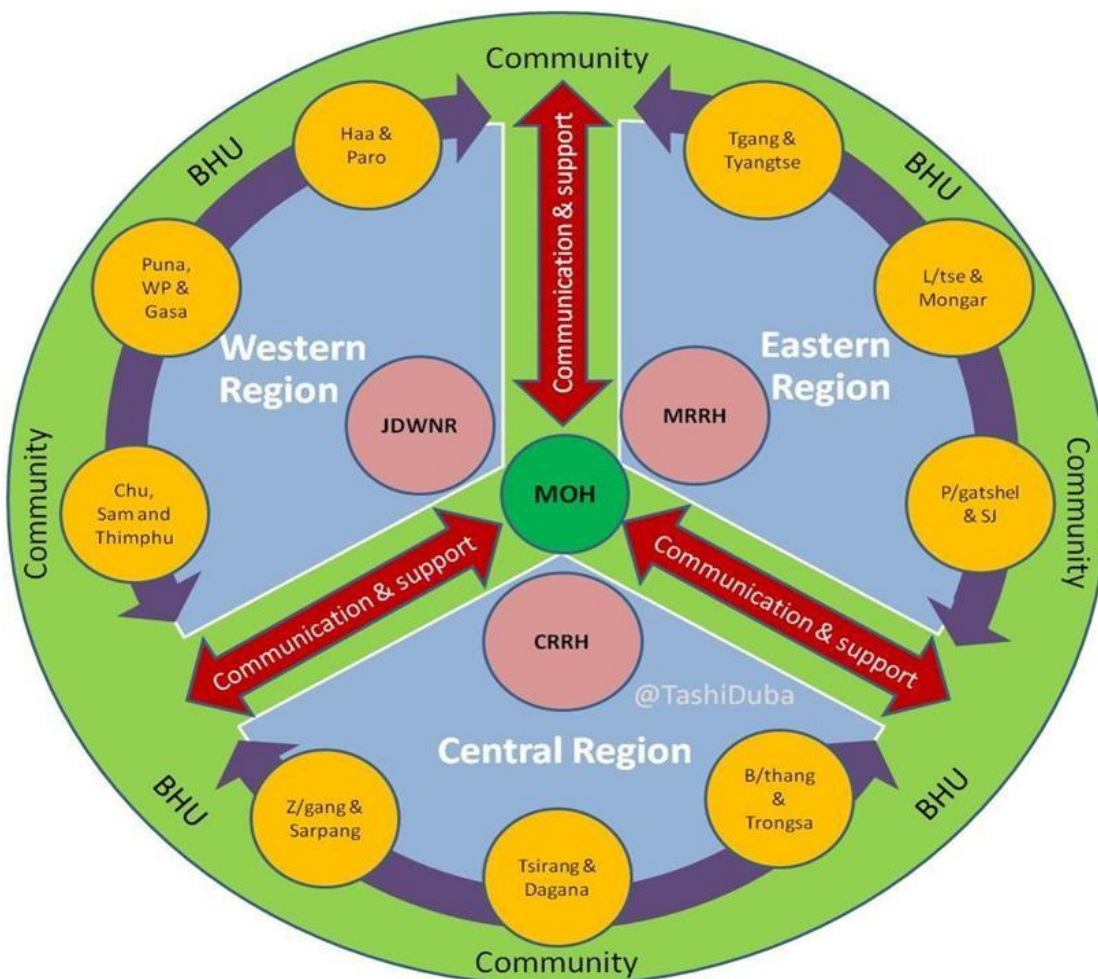
ISO pics

9) MEDICAL SURGE CAPACITY:

If any of the affected hospital is overwhelmed with the event, the deployment of health capacity shall be as per the following mechanism of medical surge capacity. The list of RRTs . The concerned hospital should contact following officials for the support for surge capacity:

1. Rixin Jamtsho, Chief, CDD (17606984)
2. Kinley Dorji, Chief, EMSD (17635634)
3. Ugyen Tshering, Program Officer, EMSD (17500270)

In case of medical supplies, the “**SOP for Medical Supply in Emergency**” shall be followed.



CRRH-GELEPHU RRTs:

- 1) Dr Tashi Penjor (GDMO) 17701849
- 2) Sangay Dorji (EMRO) 77104055
- 3) Chenga Dorji (Lab technologist) 177884034
- 4) Jamyang (Sr. Adm) 17644383
- 5) Dorji Wangdi (Pharmacist) 77653215
- 6) Yeshe Wangdi (Driver) 17629295

To mobilize health workers form **KGUMSB**.

10) HOLDING ROOM:

If theres any positive case patient in Isolation ward and if you are suspecting another patient you keep them at holding room until there test results arrive.

Designated area: Back up quarantine facility ECB.

Bed capacity:

ECB pic

11) EVACUATION TEAM:

Confirmed cases from the hospitals requiring intensive care shall be evacuated to JDWNRH.

TEAM COMPOSITIONS:

- 1) Pema Thinley (EMT) 17560214
- 2) Subash Rai (Driver) 17825692/77408332

RESPONSIBILITIES:

- Coordinate referral of COVID-19 cases to higher health facilities
- Coordinate and arrange helicopter services
- Coordinate evacuation of COVID-19 patients Zhemgang central school Football ground for Air lift.
- Coordinate and transfer cases to identified quarantine site.
- Prepare and transfer suspected cases to the isolation room 1
- Provide treatment and resuscitation if required
- Inform Dr.Tandin Wangchuk and Emergency team of any suspected cases.

12) INFECTION CONTROL:

The purpose of decontamination and disinfection is to neutralize and kill COVID-19 (SARS-CoV- 2) virus through process of cleaning, disinfection and decontamination. This is done to prevent further infection to other people.

12.1) HAND HYGEINE:

Hand washing with soap and water or alcohol hand-rub should be performed as per processes described in the *National Infection Control and Medical Waste Management Guideline 2018* and SOPs at different units of the hospitals.

12.2) DISINFECTION AND DECONTAMINATION:

For cleaning the environment, use 0.1% bleaching/chlorine solution

Decontamination, use 0.5% bleaching solution/chlorine solution

For preparation of these solution, refer “Infection Control and Medical Waste Management Guideline, 2018.”

Note: Refer SoP on Decontamination and Disinfection

TEAM COMPOSITION:

- 1) Pema Wangdi (SN) Infection Focal Person. 17766089
- 2) Sherab Dorji (Dental Hygienist) Infection control & Mortuary. 17863818
- 3) Jamtsho (Caretaker) 17801695.

JOB RESPONSIBILITIES:

HEALTH OFFICIALS:

- Participate in initial planning and coordination meeting.
- Supervise medical waste management and handling of dead body as per the ICNWM guidelines.
- Advice IC and section chiefs immediately of any unsafe, hazardous or security related conditions
- Monitor safe working environment for safety of all the staff involved in dealing with COVID-19 cases
- Maintain adequate supplies of PPE, medical devices in coordination with Medical Store.

WARD BOY/CARETAKER:

- Responsible for preparation of disinfectant
- Conduct disinfection and decontamination of rooms (at least 3 times a day) as per the directives of the health official.
- Any other work assigned by the health official.

CLEANER:

- Responsible for cleaning, collection and disposal of waste
- Conduct cleaning of rooms and other areas (every shift)
- Any other works assigned by the health officials.

12.3) MORTUARY MANAGEMENT:

COVID-19 is an infectious disease with proven transmission from person to person. Transmission occurs from close contact through infectious materials like respiratory droplets, fecal excretion and oral secretions. Therefore, safe management of dead body as per the approved standard operating procedure is critical for preventing further transmission of the infection and associated consequences.

The cremation process is associated with emotions and is a sensitive issue. It should be handled with sensitivity and respect. Therefore, before any procedure, the family must be informed and fully explained about the nature of the disease, risk of infection, cremation processes, taking into consideration their religious and cultural values and obtain a formal consent from the family.

RESPONSIBILITIES:

- Prepare proper handling taking of deceased as per the directives received from MoH
- Transport dead body to the mortuary after decontamination (0.5 % Chlorine)
- Maintain the records of the deceased
- Infection Control Focal Person will guide on proper disposal of bodies
- Coordinate with Red Cross for Dead Body Handling.

Note: Refe SOP for Safe and Dignified Management of Dead body of Suspected or Confirmed COVID-19 2nd Edition

? Cremation ground.

13) Supply and Operational Logistics

13.1) Medical Supplies

1) Bhim Maya Subba (Phc. Tech) Store Incharge, 17420859

Job responsibilities:

- Ensure availability and timely supply of adequate medical supply
- Provide regular update to Medical Desk Chief on the status of medical supply

- Compile, review and recommend the requirement of medical equipment, and supplies
- Maintain up to date inventory of equipment, supplies and other materials required to effectively respond to health emergency
- Facilitate and mobilize resources for the health response team during the outbreak management

13.2) Other Logistics:

1) Norbu Lhamo (Adm. assistant), 17729791

Job responsibilities:

- Liaise with Dzongkhag Procurement Officer:
- Arrange materials for temporary shelter (tent, bedding, and clothing)
- Maintenance and repair of damaged infrastructure identified for COVID-19 management
- Ensure adequate supplies of stationary, sanitary, electrical equipment and other necessary items
- Ensure continuous supply of water, food, medical and other general supplies
- Ensure adequate transportation logistics

14) MAINTAINCE:

1) Wangchukla (Sr. Tech) 17885698.

Job responsibilities

- Ensure uninterrupted supply of water and light
- Maintenance and repair of damaged infrastructures.
- Communicate with Mrs. Norbu Lham, ADMO for logistics and supply.
- Report to Dr.Tandin Wangchuk in case of incidences

15) RISK COMMUNICATION:

1) Tashi Wangmo (HA) Help desk counsellor, 17928411.

Responsibilities:

- Set up Help Desk in Consultation Room 2

- Disseminate and counsel patients on preventive measures regarding COVID-19
- Conduct periodic awareness
- Display of posters and materials by Ministry of Health in the community.
- Manage and verify the rumors and misinformation
- Produce and disseminate timely information including FAQ
- Conduct daily media monitoring of Health Workers
- Community mobilization.
- Only the information shared by Ministry of Health shall be disseminated.
- Communicate with ADHO for relevant materials.

