

STRENGTHENING COMMUNITY SURVEILLANCE FOR COVID-19

Integrated Disease Surveillance Programme
National Centre for Disease Control
Directorate General of Health Services
Ministry of Health and Family Welfare, Govt. of India

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(9 March 2020)

Epidemiology of COVID-19

- Agent - Corona viruses belong to a large family of viruses, some causing illness in people and others that circulate among animals, including camels, cats, bats etc.
- The etiologic agent responsible for present outbreak of COVID-19 is SARS-CoV-2 which **is a novel coronavirus**.
- Transmission of coronaviruses can occur via **respiratory secretions**. Nosocomial transmission has been documented in COVID-19.
- Current estimates of the incubation period of 2019-nCoV range from **2-14 days**.
- Most common symptoms include **fever, fatigue, dry cough and breathing difficulty**. Upper respiratory tract symptoms like sore throat, rhinorrhea, and gastrointestinal symptoms like diarrhea and nausea/ vomiting are seen in about 20% of cases.

Case definitions – Suspect case

- A patient with **acute respiratory illness** {fever and at least one sign/symptom of respiratory disease (e.g., cough, shortness of breath)}, **AND** a **history of travel** to or residence in a country/area or territory reporting local transmission (See NCDC website for updated list) of COVID-19 disease during the 14 days prior to symptom onset;

OR

- A patient/Health care worker with **any acute respiratory illness** **AND** having been in **contact with a confirmed** COVID-19 case in the last 14 days prior to onset of symptoms;

OR

- A patient with **severe acute respiratory infection** {fever and at least one sign/symptom of respiratory disease (e.g., cough, shortness of breath)} **AND** **requiring hospitalization** **AND** with **no other etiology** that fully explains the clinical presentation;

OR

- A case for whom **testing** for COVID-19 **is inconclusive**.

Case definitions – Laboratory confirmed case

- A person with **laboratory confirmation** of COVID-19 infection, irrespective of clinical signs and symptoms.

Definition of Contact

A contact is a person that is involved in any of the following:

- Providing direct care **without proper** personal protective equipment **(PPE)** for COVID-19 patients
- **Staying in the same** close environment of a COVID-19 patient (including **workplace, classroom, household, gatherings**).
- Traveling together in **close proximity** (1 m) with a **symptomatic person** who later tested **positive** for COVID-19.

Types of contacts

High Risk

- **Touched** body fluids of the patient (Respiratory tract secretions, blood, vomit, saliva, urine, faeces)
- Had **direct physical contact** with the body of the patient including physical examination **without PPE**.
- **Touched or cleaned** the linens, clothes, or dishes of the patient.
- Lives in the **same household** as the patient.
- Anyone in **close proximity (within 3 ft) of the confirmed case** without precautions.
- Passenger in close proximity (within 3 ft) of a conveyance with **a symptomatic person who later tested positive** for COVID-19 for more than 6 hours.

Low Risk

- Shared the same space (Same class for school/worked in same room/similar and **not having a high risk exposure** to confirmed or suspect case of COVID-19).
- Travelled in same environment (bus/train/flight/any mode of transit) but not having a high-risk exposure.

Key considerations – Surveillance

- Surveillance period is for **28 days** – (**14 days quarantine** at home or hospital or a designated facility and next **14 days** is for **self reporting**)
- Testing –
 - **All high risk contacts to be tracked, quarantined and lab-tested** as per the protocol.
 - For **low risk** contacts – lab-test **only when the person under surveillance develops symptoms**.
- Sample – Throat swab, Nasopharyngeal swab (Details in the session on lab)
- Treatment :
 - Symptomatic Management
 - No drug(s) or vaccine recommended presently

Key considerations – Surveillance (Contd.)

- **Indian Nationals** – Irrespective of the location of the **health care facility** where the suspect/confirmed case is **admitted**, it will be included in the line list of the State **where the case resided** during the last 14 days (prior to or after the onset of the symptoms)
- In case of any conflict, the States may discuss the matter amongst themselves and take a decision
- **Foreign Nationals** - An individual or a group of foreign nationals if found positive and **admitted in a designated health facility** in a particular State, that state to include such foreigners in its line list.

Key consideration – Contact Tracing

- A positive case may have **contacts in multiple Districts/ States**
- Tracking of all the contacts located in a particular District/State will be the responsibility of that District/State
- In case of **any high risk contact** found in the particular District/State, **sampling to be carried out by** District/State along with Home/Hospital quarantine of the said contact.
- **Sampling** to be carried out **strictly in accordance with the guidelines**
 - **Symptomatic Suspects and High Risk Contacts**

Screening of Travelers for 2019-nCoV

- In flight announcement
 - Filling of Self declaration form
 - Suspect case – Case Definition
 - Will be referred to designated Hospital and information shared with CSU IDSP/NCDC
 - Close contacts (co passengers seated in the same row, 3 rows in front and 3 rows behind along with some of the cabin crew) – Information be shared as per interim guidelines
 - List of passengers who have history of close contact (as per self declaration form) will be shared to IH Division and State/District for in-country surveillance by IDSP on daily basis.

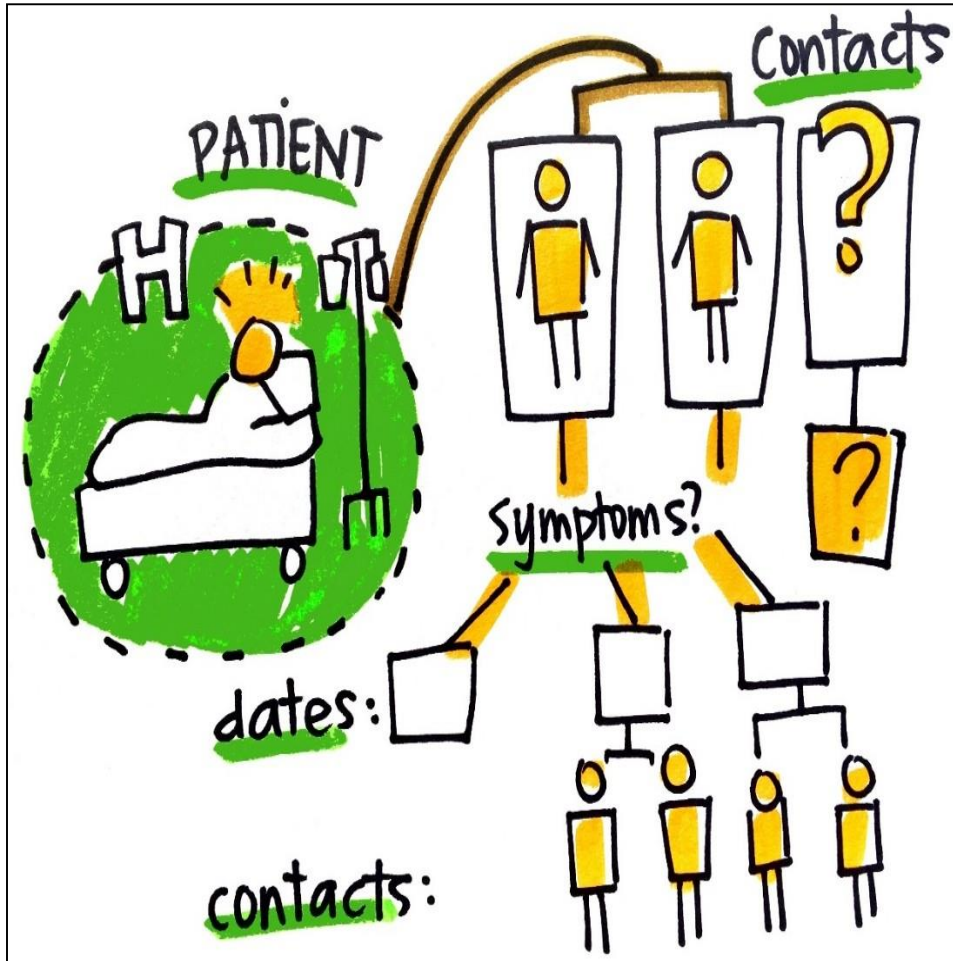
Home Quarantine/Isolation

- Every Passenger arriving in India from COVID-19 affected countries to be followed up for 28 days irrespective of symptoms
- Follow up by concerned PHC Staff and reporting to Taluka
- Taluka to compile, follow-up every day and share with District Surveillance unit
- District to prepare line-list and update every day to State Surveillance Unit
- Daily personal visit follow-up / telephonic
- Always keep personal details of persons confidential- Both symptomatic and asymptomatic
 - ABC- Aged/Sex, Taluka, District, National, returned from..... Country..... Days back.

Advice to persons who are on home quarantine

- ✓ Be informed of illness
- ✓ Stay home, preferable isolate yourself in a separate well ventilated room, avoid common areas frequented by other member of family
- ✓ Avoid frequent contact with other. If inevitable always maintain at least 2 metres distance
- ✓ Avoid frequent touching of face; Avoid hand shaking and wash hands frequently with soap and water
- ✓ Follow Cough Etiquette
- ✓ Take plenty of fluids
- ✓ Avoid having visitors
- ✓ Wash linen separately and clean surfaces with detergent or 0.5% hypochlorite solution (available)
- ✓ Monitor your health for appearance of symptoms like fever, cough and/or breathing difficulty. If you develop any of these symptoms please contact nearest health facility, DSO or 104 health helpline for further guidance

Contact Tracing



Identify contacts of the infected patient and record:

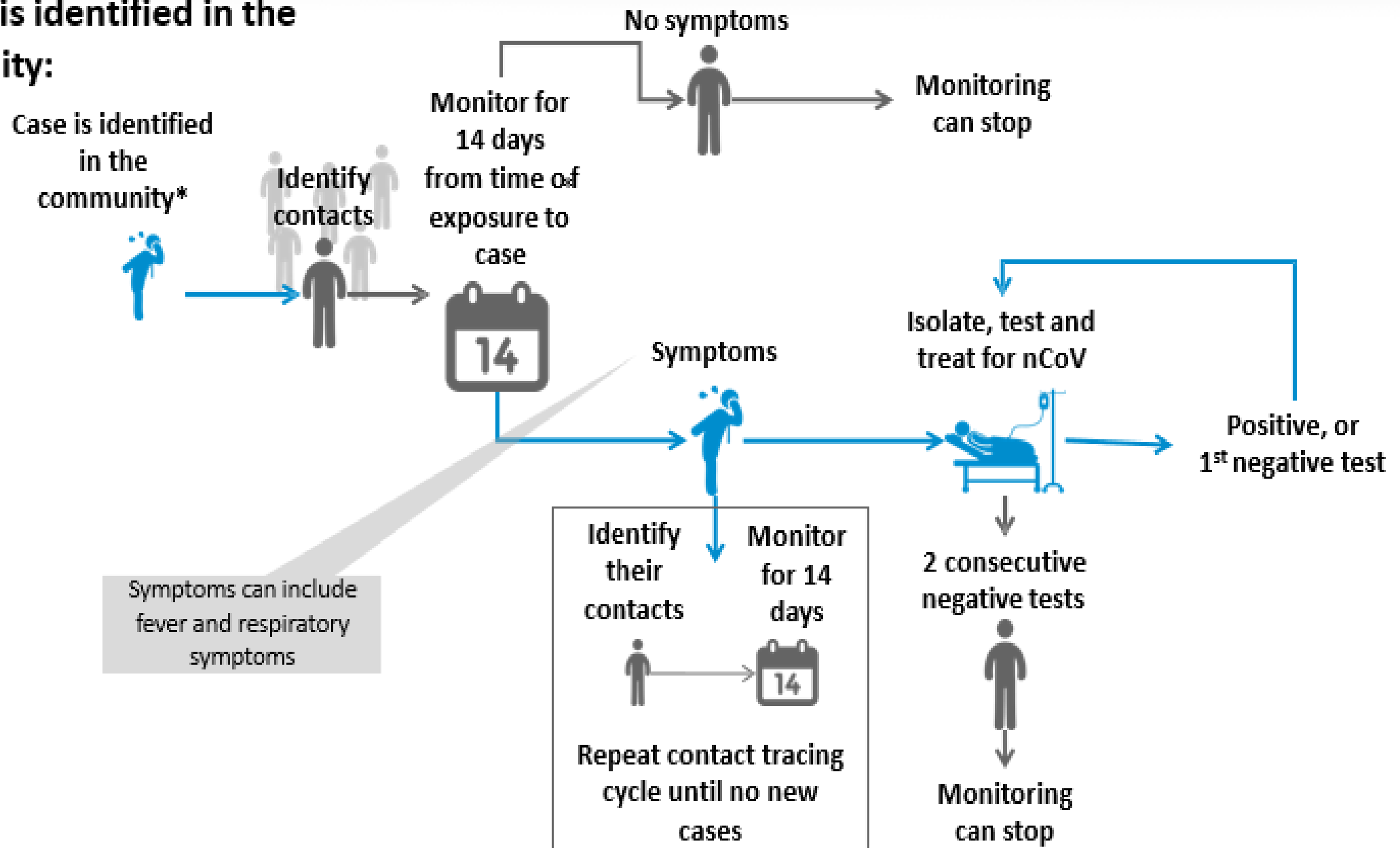
- ✓ Names, contact, demographic information.
- ✓ Date of first and last exposure or date of contact with the confirmed or probable case, and.
- ✓ Date of onset when fever or respiratory symptoms develop.

The common **exposures** and **type of contact** with confirmed or suspected cases should be thoroughly documented for any contacts that become infected.

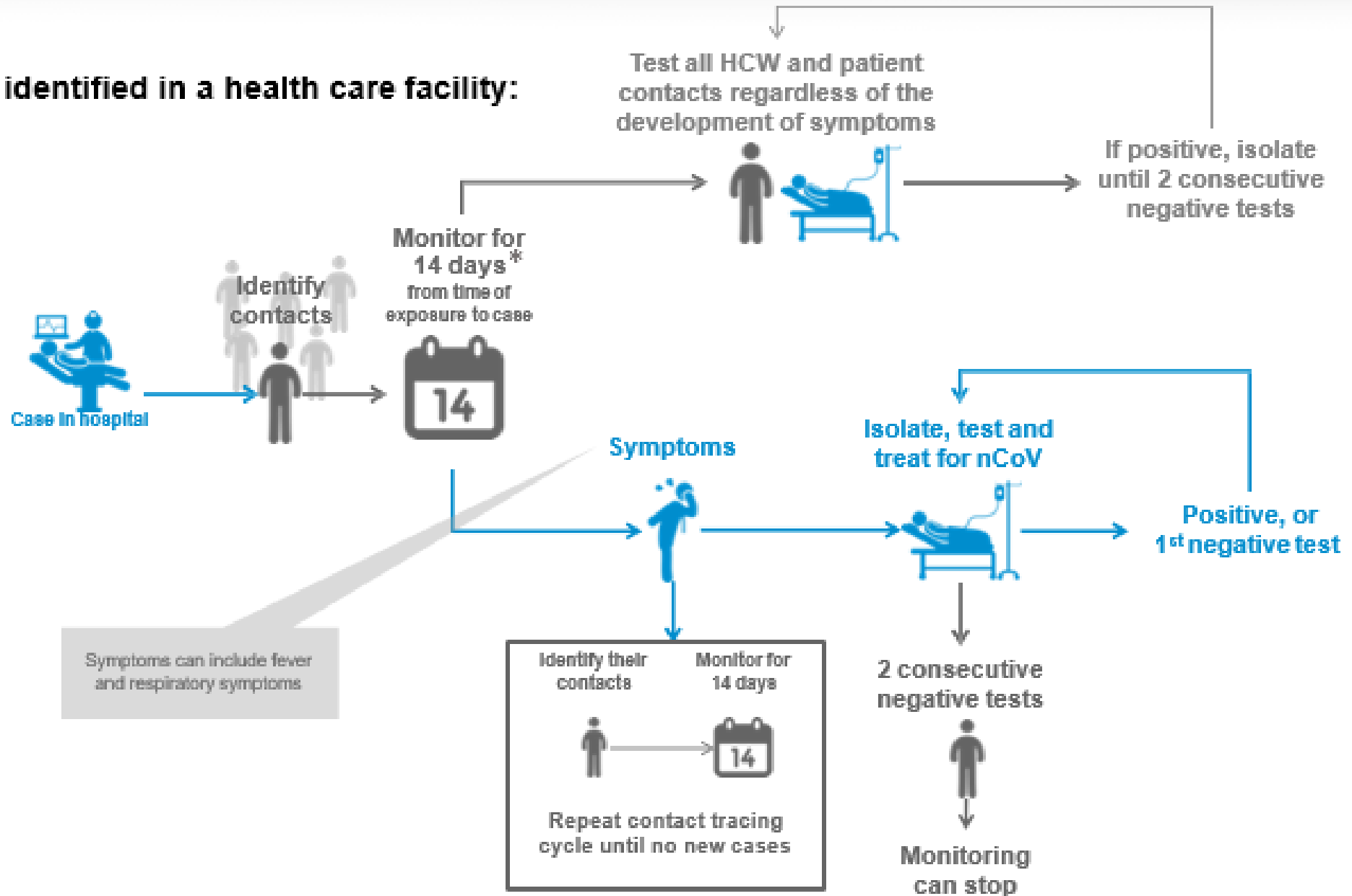
Safety precautions for contact tracing for Health Staff

- ✓ Maintain - 2 meter from the contact
- ✓ Masks should be worn by the contact tracing team
- ✓ Personal protective equipment (PPE) as per requirements
- ✓ Maintain IPC and hand washing

If a case is identified in the community:



If a case is identified in a health care facility:



ANNEXURE 4

Format B (Line~~list~~ of Format A from all DSU to be updated on daily basis by SSU)

NAME OF State:

		LINELIST FORMAT FOR REPORTING OF DAILY HEALTH STATUS OF PASSENGERS UNDER OBSERVATION										
SL No.	Name	Age	Gender	Address	Phone	District	Country of visit	Date of departure from affected country	Date of receipt of information	Observation started from	Today's Health status	Comments

- New passengers enrolled for observation:
- Cumulative number of Passengers under observation:
- No. of passengers who have completed 28 days observation period:

Lab Testing Facilities - Karnataka

❖ **NIV Pune** is the reference laboratory in India for testing COVID-19

❖ **NIV Pune** received positive controls from Berlin, Germany.

➤ **In Karnataka:**

- ✓ NIV Bengaluru Unit - Bengaluru.

- ✓ VRDL BMC& RI - Bengaluru.

- ✓ To be operational this week:

 - ✓ MMC- Mysuru

 - ✓ HIMS- Hassan

 - ✓ SIMS- Shivamogga

Cluster containment Strategy

Scenarios:

- Travel related cases reported in India
- Local transmission of COVID-19 (Single Cluster)
- Large outbreaks of COVID-19 disease (Multiple cluster)
- India becomes endemic for COVID-19
 - IDSP, will be involved in community surveillance in all of the above mentioned scenarios.

Containment zone

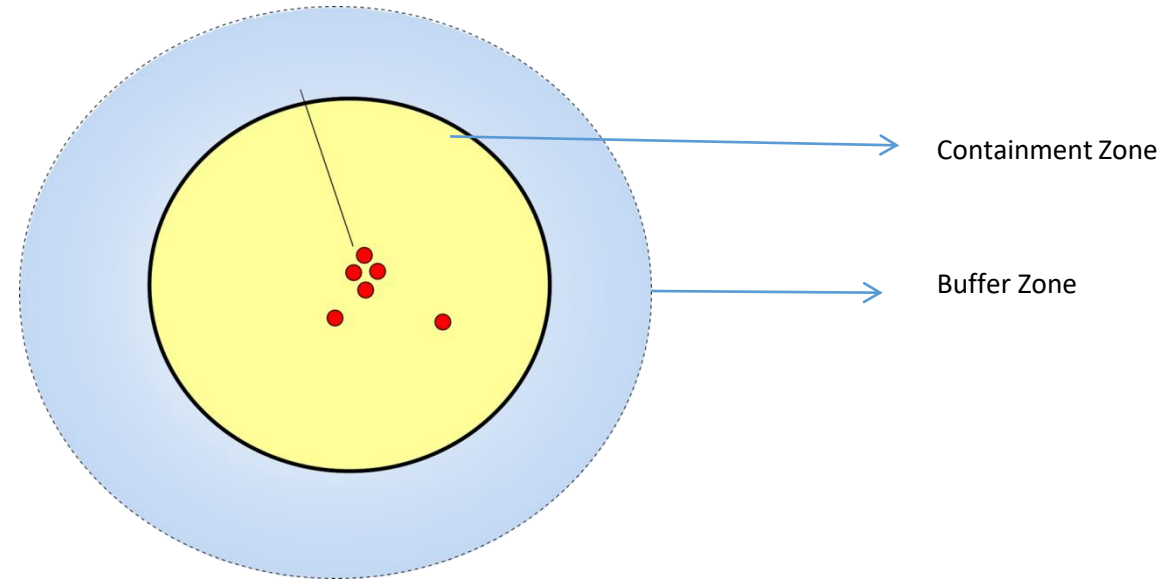
- A Central RRT will help the State/ District administration in **mapping the Containment Zone**.
- The containment zone will be defined based on
 - The index case / cluster, which will be the designated epicenter.
 - Geographical distribution of cases around the epicenter.
 - Local administrative boundaries of urban cities /town
- A scenario based approach (e.g. a small cluster in a closed environment or single cluster in a residential colony) while deciding the **perimeter of containment zone**.
- The decision on perimeter of the containment zone **is to be guided by continuous real time risk assessment**.

Containment zone Cont...

- Implementation of strict perimeter control is **vital for the containment** of COVID-19.
- Perimeter control is **primarily an administrative measure** – Enhanced surveillance within the perimeter is a part of the larger administrative response.
- Rapid Response Teams (RRTs) needs to be oriented on the enhanced surveillance & contact tracing.

Buffer Zone

- Buffer Zone is an area around the Containment Zone, where new cases most likely to appear.
- There will not be any perimeter control for the buffer zone.



Surveillance Activities in Containment Zone

Surveillance Activities in Containment Zone

The residential areas will be divided into sectors for the ASHAs/Anganwadi Workers/ANMs each covering 50 households (30 households in difficult areas).

Supervisory officers (PHC/CHC doctors) in the ratio of 1:4.

The field workers (FW) will be performing active house to house surveillance daily in the containment zone from 8:00 AM to 2:00 PM and also encourage self reporting.

The suspect will be isolated till such time he/she is examined by the supervisory officer.

The field worker will provide a mask to the suspect case and to the care giver identified by the family.

Line list the family members, contact listing, identification of close contacts and all those having symptoms.

Follow up contacts identified by the RRTs within the sector allocated to the FWs.

As per case definition the supervisory officer, visit house, make arrangements to shift the suspect case to the designated treatment facility.

The supervisory officer will collect data from the health workers under him/ her, collate and provide the daily and cumulative data to the control room by 4.00 P.M. daily.

Scenario 1:

Imported Travel related cases reported in India

Containment Zone

- Isolation & management of case
- Quarantine of contacts
- Enhanced IEC
- Active ARI/ILI Surveillance
- Enhanced self reporting
- Enhanced personal hygiene, hand hygiene & cough etiquettes

Buffer Zone

- Enhanced Passive ARI/ILI Surveillance
- Enhanced Self reporting

Scenario 2:

Local transmission – Single cluster

Containment zone

- Isolation & management of case
- Quarantine of contacts
- Enhanced IEC
- Active ARI/ILI Surveillance
- Enhanced self reporting
- Enhanced personal hygiene, hand hygiene & cough etiquettes
- Establish control room in the local health facility
- Ban local mass gathering
- Lockdown of identified cluster for e.g. Schools/residential building/Hotel

Buffer zone

- Enhanced Passive ARI/ILI Surveillance
- Enhanced Self reporting.
- Enhanced media surveillance
- Trainings on case definitions and contacts

Scenario 3: Large outbreak – Multiple clusters

Containment zone

- Isolation & management of case
- Quarantine of contacts
- Enhanced IEC
- Active ARI/ILI Surveillance
- Enhanced self reporting
- Enhanced personal hygiene, hand hygiene & cough etiquettes
- Ban local mass gathering
- Closure of schools, offices, colleges
- Environment disinfection
- Refrain from leaving home + Border measures
- Establishment of control room at the block and district level
- Enhanced media surveillance in and surrounding blocks/districts
- Monitoring of rumour register
- Mobile specimen collection units

Scenario 3: Large outbreak – Multiple clusters

- Buffer zone
- Isolation & management of case
- Quarantine of contacts
- Enhanced IEC
- Active ARI/ILI Surveillance
- Enhanced self reporting
- Enhanced personal hygiene, hand hygiene & cough etiquettes
- Border measures
- Ban all mass gatherings in buffer zone
- Media surveillance
- Mobile specimen collection units

Scenario 4: Becomes Endemic

- Isolation & management of cases as per guidelines
- Enhanced IEC
- Routine Lab ARI/ILI Surveillance
- Enhanced self reporting
- Enhanced personal hygiene, hand hygiene & cough etiquettes
- Categorisation & Treatment
- Other Lab tests/Serological tests as per availability
- Research
- Vaccination as per availability
- Media scanning and verification
- Rumour register monitoring

Containment Perimeter- Border measures

- Refrain from leaving their homes and moving around from the containment zone for at least 14 days
- Refrain participating in events held in indoor venues when fever or respiratory symptoms are detected.
- Employers to cooperate for leaves or absence without a written diagnosis
- Enhanced entry screening for travellers from containment zone
- Involvement of all concerned departments.

IEC/BCC activities

- Education department
- Women and Child Development Department
- Transport Department
- Food safety Department
- Department of Animal Husbandry
- Tourism Department
- IT/BT departments
- Police department
- RDPR, UDD and other departments
- Other stakeholders like medical associations (IMA, IAP, PHANA), nursing associations, hotel association, Clubs, NGOs, WHO, Unicef, Resident Welfare associations etc.

State Level Meetings have been held with concerned departments and state advisories also have been issued

Monitor Surge capacities Daily– (Human resource, Hospitals Logistics etc.)

- Infection prevention & Triage facilities at Hospitals
- Designation of **Isolation wards at Hospitals** : Monitor minimum standards and requirements
- Identification of Govt./Non Governmental buildings to be designated as **isolation/quarantine centres** (Large, exclusive isolation facilities)
- **Additional workforce** may be mobilized from neighbouring Districts/Medical colleges/private hospitals/NGOs/Trained Volunteers to cover household in containment zone.
- Nursing students/other paramedical workers may be oriented in advance for proper mobilization of the staff during the containment procedures.
- **Adequate logistics to be maintained at District and Taluka levels.**
 - Stocks of Personal protective equipment (PPE), Masks, Medicines, sample collection kits etc.

Monitor Surge capacities Daily

- District Monitoring Committee Chaired by DC, Taluka Monitoring committee: Roles and responsibilities
- District Rapid response teams: Multi-departmental with name-wise list and clear roles
- Proper information to general public- all modes of communications/ meetings/media
 - Risk Communication
 - Manage rumours, legal case if required
- District control room- DCs can use disaster management call centre manned by health personnel
- Points of Entry to be reviewed daily as per Government instructions: Road, Airport, Seaport

Monitor Surge capacities Daily

- Update on 28 day follow-up of travellers
- Contact tracing if applicable
- Training of health staff at all levels
- Review Ambulance availability and redeployment
- Co-ordination with private hospitals
- Availability and over-pricing of masks
- Budget availability and re-allocations

Actions at State

- **Daily state media briefing by Hon'ble Minister for Health & Family Welfare / Hon'ble Medical Education Minister at 6:00 pm**
- Daily state review Meeting by Additional Chief Secretary-Health & Family welfare
- Chief Secretary- Government of Karnataka reviewing regularly
- Co-ordination meetings with individual departments and sectors and advisories/instructions given
- Regular communication, instruction, advisories to districts

Latest Travel Advisory: GOI

(6th March 2020)

Indian citizens are advised to refrain from travel to China, Iran, Republic of Korea, Italy & Japan and advised to avoid non-essential travel to other COVID-19 affected countries.

In supersession of all earlier advisories , the latest Travel Advisory mentions :

- All Regular/eVisas/ issued **to nationals of Italy, Iran, South Korea and Japan** issued on or before **March 03, 2020** and who have **not yet entered** India, **stand suspended with immediate effect.**
- Regular/eVisa issued to nationals of **Peoples Republic of China** issued on or before **February 05, 2020** were **suspended** earlier, which shall remain in force.
- Those requiring to travel to India due to compelling reasons, may seek fresh visa from nearest Indian Embassy/Consulate.
- **Regular/eVisas issued to all other foreign nationals** who have **travelled** to Peoples Republic of **China, Iran, Italy, South Korea and Japan**, on or after **February 01**, and who have not yet entered India, stand suspended with immediate effect.
- All foreign and Indian nationals entering into India from any port, are required to furnish duly filled **self declaration form** including **personal particulars** and **travel history** to Health officials and Immigration officials at all ports.

Latest Travel Advisory: GOI

(6th March 2020)

Compulsory Certification of having tested negative for COVID-19

In addition to Visa restrictions already in place, passengers traveling from /having visited **Italy or Republic of Korea and desirous of entering India will need certificate of having tested negative for COVID-19** from the designated laboratories authorized by the health authorities of these countries. This will be enforced from 0000 Hrs of 10th March, 2020 and is a temporary measure till cases of COVID-19 subside

Universal Screening and self-declaration

All international Passengers entering into India are required to furnish duly filled self-declaration form (including personal particulars i.e. phone no. and address in India) to Health Officials and Immigration officials and undergo Universal Health Screening at the designated health counters at all Points of Entry

Latest Travel Advisory: GOI

(6th March 2020)

While returning back to India, if a traveler feels sick during his/her journey:

- To Inform the airlines crew about illness.
- Seek mask from the airline crew.
- Follow the directions of airline crew.

Follow the direction of the airport health officer after disembarkation.

If a traveler feel sick (cough/fever or difficulty in breathing) within 28 days after return from COVID-19 affected areas:

Immediately call the Helpline number (011-23978046), inform about your travel history and follow the directions provided.

Isolate yourself at home and wear a mask till such time you are examined by a doctor from health authority.

Follow the directions of the health authority ☐ For any queries related to health, people may contact Ministry of Health & Family Welfare 24*7 helpline number (+91-11-23978046) or email at (ncov2019@gmail.com)

Information

- **104 Arogya Sahayavani (call center)** has reserved 10 lines for receiving calls for COVID-19
- Department Number (SSU): 080 - 22208541 / 22374658
- Email id: ssuidspbangalore@gmail.com
- Advisory/Guidelines/FAQs are available on Karnataka State Health Department website
 - <https://karunadu.karnataka.gov.in/hfw/kannada/Pages/nCov-iec.aspx>

Reliable Sources of Information:

- **Websites:**
 - <https://www.mohfw.gov.in/>;
 - <https://ncdc.gov.in/index4.php?lang=1&level=0&linkid=127&lid=432>
 - www.pib.gov.in
 - <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
- **Twitter Handles:** @dhfwka; @MoHFW_INDIA; @PIB_India ; @WHO

Recommendations to General Public

- **Do not panic, Be aware**
- **Practice frequent handwashing: Wash hands with soap and water or use alcohol based hand-rub**
- **Cover your nose and mouth with handkerchief/tissue while sneezing and coughing. Throw used tissues into closed bins immediately after use**
- **See a doctor if you feel unwell (fever, difficulty in breathing and cough)**
- **Mask is recommended only to those who are having flu like symptoms or those who are caring for such persons in close contact**
- **Avoid participating in large gatherings if you are not well.**
- **Avoid non-essential travel to COVID-19 affected countries**
- **Don't touch eyes, nose, face frequently**
- **Avoid close contact with person experiencing cough and fever**
- **If you have any signs/symptoms with travel history to COVID-19 affected countries or contact with COVID-19 confirmed persons during last 14 days, please call toll free health helpline 104 and mail to ssuidspbangalore@gmail.com**

THANK YOU

