

COVID-19: A guide for Medical Officers in Primary Health Centres

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A large, solid orange hexagon with a thin dark blue outline, centered on a white background. The text "What is COVID-19?" is written in white serif font across the middle of the hexagon.

What is COVID-19?

Clinical features of COVID-19 (1/2)

- COVID-19 is an acronym that stands for **coronavirus disease** of 2019. The name was given by the World Health Organization (WHO) on February 11, 2020 for the disease **caused by the novel coronavirus SARS-CoV-2.**
- COVID-19 is an acute respiratory illness characterized by:
 - **Fever,**
 - **Dry cough and**
 - **Shortness of breath.**
 - Some patients may also have aches and pains, nasal congestion, runny nose, sore throat or diarrhea.
- The incubation period (time between infection and appearance of first sign/symptom) of COVID-19 is up to 14 days

Clinical features of COVID-19 (2/2)

- The disease ranges from mild to severe and has been classified according to severity as syndromes associated with COVID-19.
- Syndromes associated with COVID-19
 - Uncomplicated illness
 - Mild pneumonia
 - Severe pneumonia
 - Acute Respiratory Distress Syndrome (ARDS)
 - Sepsis
 - Septic shock
- <https://main.mohfw.gov.in/sites/default/files/Guidelines%20on%20Clinical%20management%20of%20severe%20acute%20respiratory%20illness.pdf>

COVID-19 Severity

81% have uncomplicated or mild illness

14% develop severe illness requiring oxygen therapy

5% require intensive care unit treatment






People at risk of COVID-19

- COVID-19 is a new disease which has never existed before. Thus humans do not have any natural immunity against the virus
- COVID-19 affects people of all age groups- **BUT** the following population sub groups are at greater risk of developing severe disease with complications
 - Elderly
 - People having other co-morbidities (CVD, hypertension, diabetes, respiratory illnesses)
 - People who are immunocompromised (on immunosuppressant drugs/people with HIV)

Transmission of COVID-19 (1/3)

Infection rate

The average number of people an ill person infects

Measles		12-18
COVID-19		1.5-4.5*
SARS		2.0-4.0
Swine flu		1.4-1.6
Seasonal flu		0.9-2.1

*according to data from Wuhan

One person infected with COVID-19 can infect on an average 1.5-4.5 other people* (it varies from country to country)

This is higher than the infection rate for seasonal flu and other respiratory syndromes of recent times

This is called **R_0 (Basic Reproduction Number)** – the average number of secondary cases arising from a primary case in a susceptible population

*Data from WHO, CDC, London School of Hygiene & Tropical Medicine and various other studies

Transmission of COVID-19 (2/3)

R_0 depends on several factors like infectiousness of agent, susceptibility of population and exposure of susceptible population.

How to reduce R_0 :

- Reducing the **spread of agent** from infected host (eg. Isolation, quarantine)
- Reducing **exposure** of susceptible host (eg. Social distancing, use of PPE)
- Reducing environmental **survival of agent** [eg. Disinfection of frequently touched surfaces, such as floors, and other commonly used areas (toilets, wash basins etc.) and objects(doorknobs, handles, keys etc.)]
- Increase **resistance** of susceptible hosts (eg. Vaccination)

Transmission of COVID-19 (3/3)

- COVID-19 spreads by the viral load present in respiratory droplets of infected persons released into the air when they cough or sneeze
- These droplets can spread the **infection in two ways:**
 - **Direct spread:** by droplets that land on the face (mouth, eyes) or hands of another person. Spread by direct contact has been seen to occur within a distance of 3 feet or 1 meter
 - **Indirect spread:** by contact with a surface contaminated by respiratory droplets. The droplets settle on surfaces (floor, furniture, clothes, keyboards, mobiles etc.). The virus can survive on contaminated surfaces for up to 2-3 days.

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**Problem
statement: Global
scenario**

Problem statement – global scenario (1/2)

COVID-19 spread rapidly across the world in a span of less than 3 months:

- **December 31, 2019** – Cluster of **27** pneumonia cases of unknown etiology were reported from Wuhan, **China**.
- **January 9, 2020** – Novel coronavirus was detected as the causative agent. **Disease named as COVID-19**.
- **January 20, 2020** – Coronavirus disease spread to **3 countries** outside China (Thailand, Japan and Korea).
- **January 31, 2020** – Disease spread to **20 countries** including **India** (9826 cases confirmed, 213 deaths).
- **March 13, 2020** – Disease spread to **123 countries**, first death reported in India (Karnataka)
- **April 28, 2020** – **29,54,222 confirmed** cases and **2,02,597 deaths** reported worldwide (212 countries/territories/areas).

Reference: World Health Organization. Coronavirus Disease (COVID-2019) Situation reports [Internet]. WHO 2020 [cited 29 April 2020]. Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>

On 11th March 2020 WHO declared COVID-19 as a pandemic.

Problem statement – global scenario (2/2)

Confirmed Cases Over Time

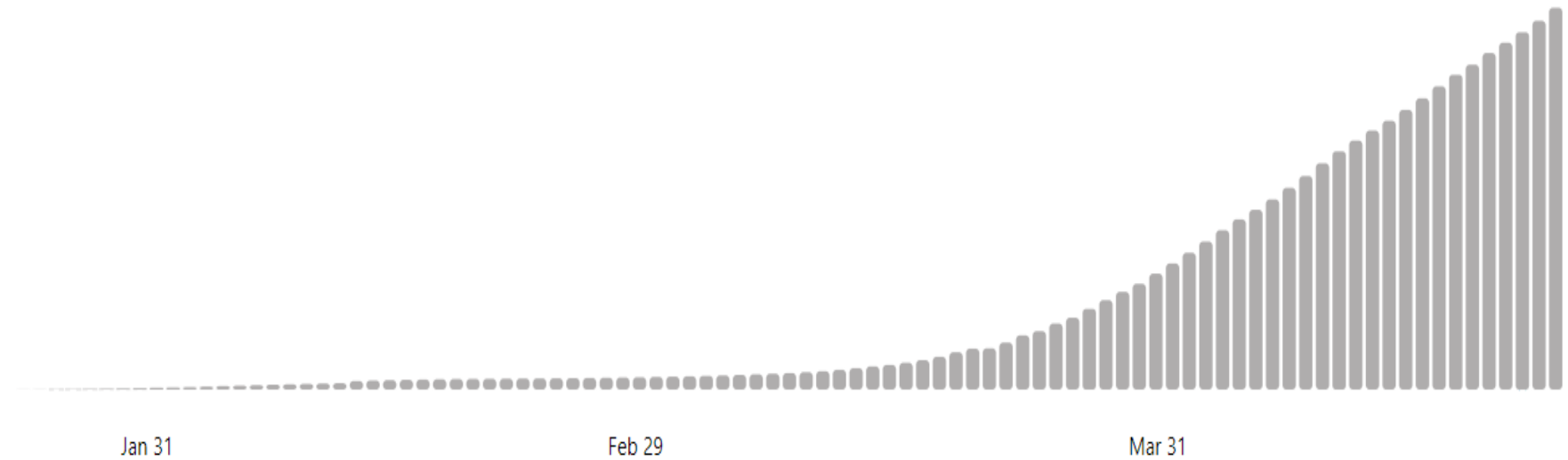
Cumulative



2,810,325

confirmed cases

Source: World Health Organization



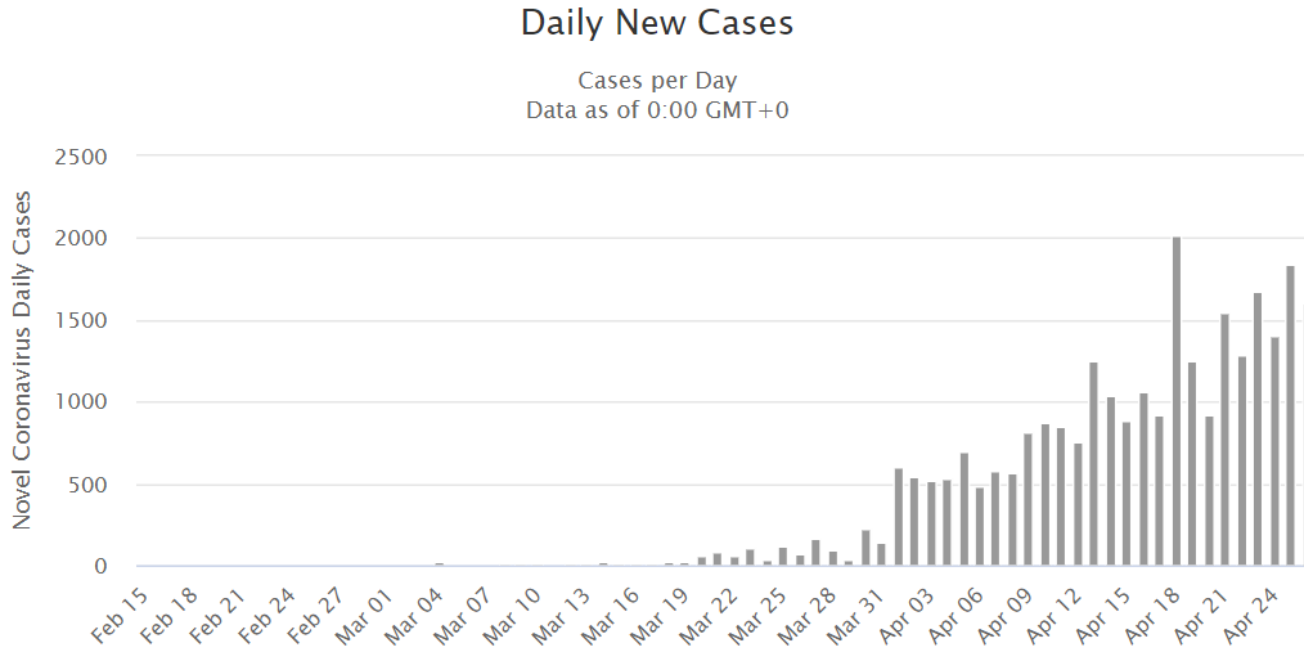
Cumulative cases of COVID-19 : World Health Organization

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**Problem
statement: India
scenario**

Problem statement – India

- January 30, 2020 – India reported its first confirmed case of COVID-19



[Click for latest information](#)

As shown in the graph, India is showing a rapid rise in the total number of cases each day

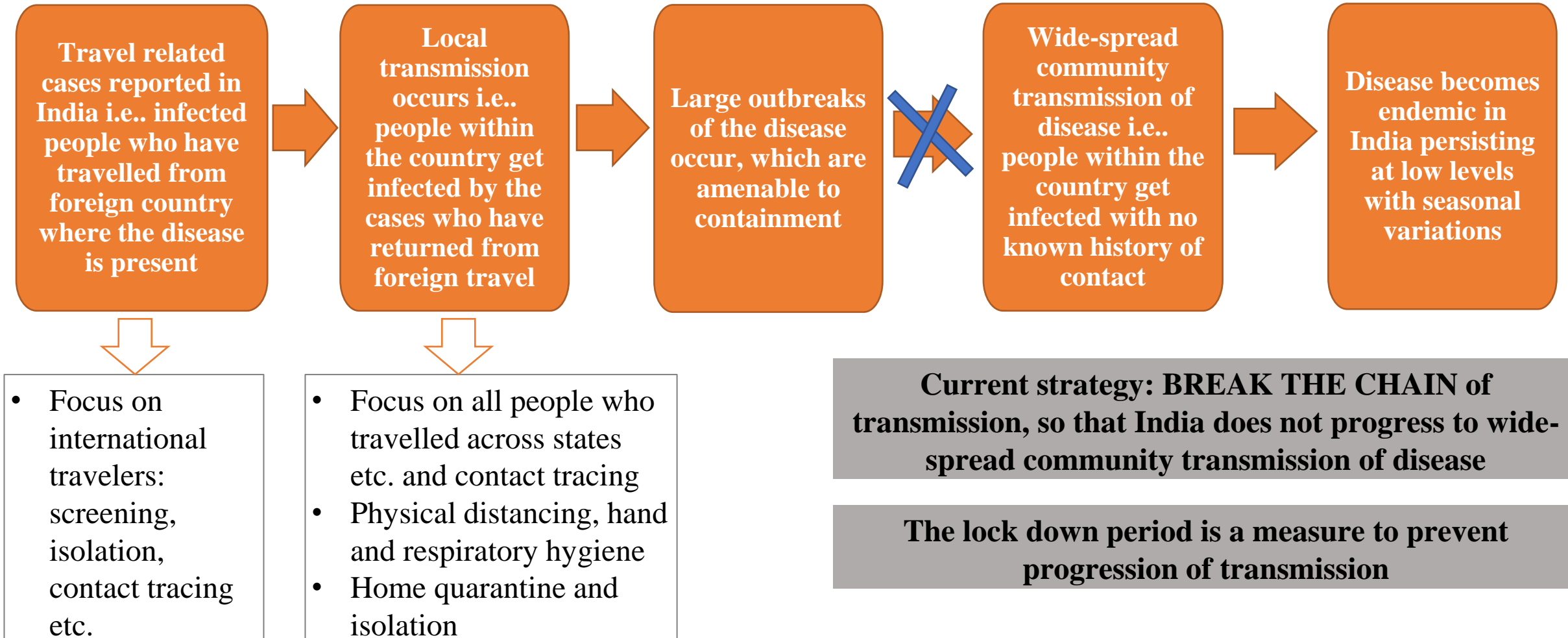
29th February 2020 – 3 cases
10th March 2020 – 45 cases
20th March 2020 – 195 cases
30th March 2020 – 942 cases
29th April 2020 – 31,332 cases

A total of 1007 deaths have been reported in India so far from COVID-19 (as on 29th April 2020).

For update of latest data regarding cases and deaths of COVID-19 in India, refer <https://www.mohfw.gov.in/>

Progression of COVID 19 and strategies for containment

The spread of disease in India would be following the possible scenarios:



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Response strategies to COVID-19

Since the guidelines regarding response to COVID-19 situation as well as routine non-COVID essential service delivery are evolving daily, please visit MOHFW website <https://www.mohfw.gov.in/> regularly for updates

Response strategies to COVID-19

1. Prevention

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Preventing Transmission: Key Principles

1. Control the source of infection

- Source of infection: Confirmed COVID-19 cases (both symptomatic and pre-symptomatic)
- Methods to control source of infection: **Testing** of suspected symptomatic and close contacts (includes pre-symptomatic cases) and **isolation** of positive cases. Since there is no proved treatment of the disease, isolation of cases remains the mainstay for controlling the source of infection.

2. Break the chain of transmission

- Chain of transmission: Direct and indirect spread (refer slide 9)
- Methods to break the chain of transmission: Reducing direct contact with respiratory droplets from infected persons (**hand hygiene, respiratory hygiene, use of masks, social distancing, quarantine of contacts**) and reducing indirect contact with surfaces infected with respiratory droplets (**infection prevention and control protocols**)

3. Reduce susceptibility to infection

- **Vaccination** of susceptible individuals. Since it might take more than a year to develop a vaccine against the disease, the focus till then is to break the chain of transmission and flatten the curve of disease.

Physical (Social) Distancing and methods

- The virus can be prevented from spreading by **maintaining safe distance (at least one meter)**.
- Since an infected person can spread the virus even before he/she develops symptoms of COVID-19, **it is important to practice distancing from people whether they are sick or healthy**

Adapted from: European Centre for Disease Prevention and Control. Guidance for social distancing measures aimed at minimizing the spread of SARS-CoV-2 [Internet]. ECDC March 2020

Method	Description	Rationale
Isolation of cases	Confirmed or suspected cases of COVID-19 are isolated in designated health facility or home (subject to fulfilling stipulated conditions) (Details in Slide 31,32)	Separating the sick from the healthy to avoid transmission of infection.
Home Quarantine of contacts	Healthy person(s) who have had contact with a suspected COVID-19 case are kept in quarantine for 14 days at home or in a facility quarantine. (Details in Slide 33) If they develop symptoms, they would be promptly tested.	Separation of potentially infected from others to avoid transmission if disease develops, even during pre-symptomatic* phase of the disease.
Physical distancing	All people are asked to stay at home. (Details in Slide 34) Closure of schools & other establishments Ban on gatherings Restricting non-essential travel Physical distancing maintained at markets and during travel	Recommendations for physical distancing of persons, particularly the high-risk groups , in order to reduce transmission, avoid increased morbidity, and thereby decrease the pressure to the health system.

Social/Physical distancing

- In order to reinforce the need for such distancing, the Government of India announced **nationwide lockdown and restricted movement** on 24th March 2020.
- Staying at home helps reduce contact between people and therefore reduces the possibility of transmission.
- Since the **entire population is susceptible** to COVID-19, physical distancing is the key to control the pandemic.

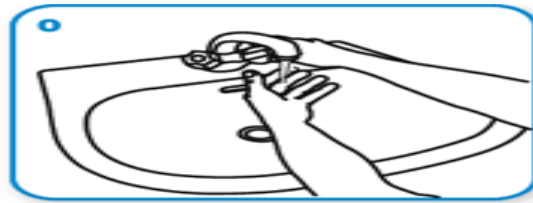
Physical distancing methods effectively reduce R_0 and help in control the pandemic

WHO prescribed steps of handwashing

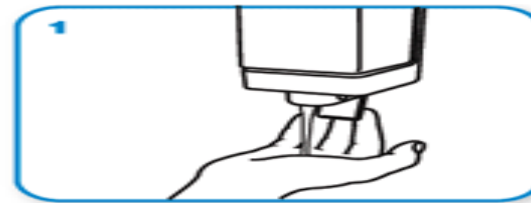
- Wash hands with soap and clean water for at least 40 seconds
- Clean hands with alcohol-based hand rub for at least 20 seconds

Make sure to wash your hands :

- After coming home from outside or meeting other people especially if they are ill.
- After having touched your face, coughing or sneezing.
- Before preparing food, eating or feeding children.
- Before and after using toilet, cleaning etc.



Wet hands with water



apply enough soap to cover all hand surfaces.



Rub hands palm to palm



right palm over left dorsum with interlaced fingers and vice versa



palm to palm with fingers interlaced



backs of fingers to opposing palms with fingers interlocked



rotational rubbing of left thumb clasped in right palm and vice versa



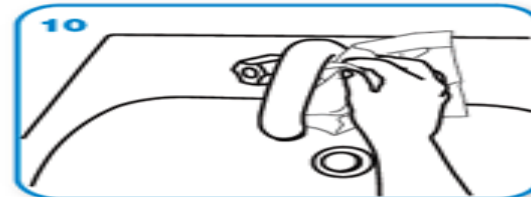
rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa.



Rinse hands with water



dry thoroughly with a single use towel



use towel to turn off faucet



...and your hands are safe.

Use of masks

Triple layer surgical mask should be used by

- Persons with respiratory symptoms
- Persons in quarantine
- Healthcare workers in low risk settings (not in direct contact with COVID-19 patients).

N-95 respirator mask should be used by healthcare workers at high risk settings (e.g. during clinical examination of patients, conducting aerosol generating procedures, etc.)^{Reference:}

Directorate General of Health Services (EMR Division). Novel Coronavirus Disease 2019 (COVID-19): Guidelines on rational use of Personal Protective Equipment [Internet]. DGHS, MOHFW, GOI 2020 [cited 25 March 2020]. Available from: <https://www.mohfw.gov.in/pdf/GuidelinesonrationaluseofPersonalProtectiveEquipment.pdf>
<https://www.mohfw.gov.in/pdf/AdditionalguidelinesonrationaluseofPersonalProtectiveEquipmentsettingapproachforHealthfunctionariesworkinginnonCOVIDareas.pdf>

Wash hands after removing and before wearing fresh masks

Masks are effective only when used properly in combination with frequent handwashing with soap and water or hand cleaning with alcohol-based hand rub and other physical distancing measures

Measures to reduce indirect transmission

Don't touch surfaces

- The virus survives on surfaces of inanimate objects for a few days.
- Therefore, **avoid touching doors, handles, table tops, key boards, mobiles etc.** of other people in public places.
- Also wash hands thoroughly after any contact with these

Disinfect

- Clean AND disinfect frequently touched surfaces **at least once daily with household disinfectants and 1% sodium hypochlorite**. This includes table tops, doorknobs, light switches, countertops, handles, desks, toilets, and sinks.
- Phones, computers, remote controls etc. should be disinfected with alcohol based (70% or more) disinfectant
- Clothes should be washed with common detergent. If handkerchief is used to cough or sneeze, or as a face mask, it should be washed daily before reusing.

Dispose safely

- All tissues and non-reusable masks should be disposed safely by burning or deep burial after disinfection with 1% sodium hypochlorite solution.

Response strategies to COVID-19

2. Management of cases

Since the guidelines regarding response to COVID-19 situation as well as routine non-COVID essential service delivery are evolving daily, please visit MOHFW website <https://www.mohfw.gov.in/> regularly for updates

Case definitions for COVID-19

A **SUSPECT CASE** is one who is likely to have been infected and **should be tested** for the disease immediately at designated testing centers. Definition of 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 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 breath)} AND requiring hospitalization AND with no other etiology that fully explains the clinical presentation;

OR

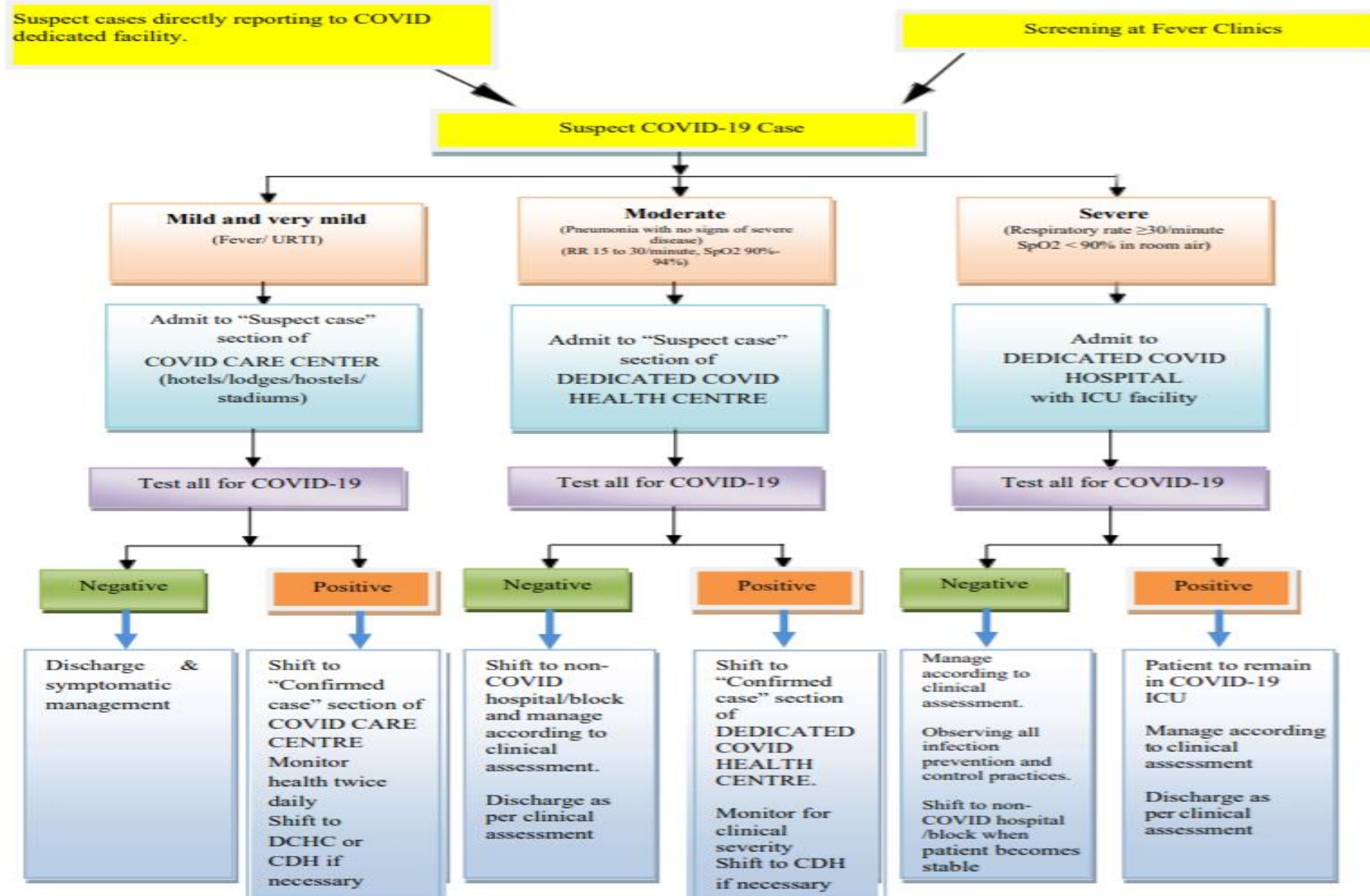
- A case for whom testing for COVID-19 is inconclusive.

LABORATORY CONFIRMED CASE: A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms.

Testing Strategy for COVID 19 (current ICMR guidance)

1. All symptomatic individuals who have undertaken international travel in the last 14 days
2. All symptomatic contacts of laboratory confirmed cases
3. All symptomatic healthcare workers
4. All hospitalized patients with Severe Acute Respiratory Illness (fever AND cough and/or shortness of breath)
5. Asymptomatic direct and high-risk contacts of a confirmed case should be tested once between day 5 and day 14 of coming in his/her contact
6. In hotspots/cluster (as per MOHFW) and in large migration gatherings/evacuee centres: all symptomatic ILI (fever, cough, sore throat, runny nose) should get tested.

MOHFW's treatment strategy for COVID-19



Types of COVID-19 dedicated facilities

1. COVID Care Center (CCC):

- **Only for cases that have been clinically assigned as mild or very mild cases or COVID suspect cases.**
- **Makeshift facilities set up in hostels, hotels, schools, stadiums, lodges etc., both public and private.**
- **Must necessarily be mapped to one or more Dedicated COVID Health Centres and at least one Dedicated COVID Hospital for referral purpose.**

2. Dedicated COVID Health Centre (DCHC):

- **Hospitals (full hospital or a separate block in a hospital with preferably separate entry\exit/zoning) that shall offer care for all cases that have been clinically assigned as moderate.**
- **Beds with assured Oxygen support. Dedicated Basic Life Support Ambulance (BLSA) equipped with sufficient oxygen support for ensuring safe transport.**
- **Must necessarily be mapped to one or more Dedicated COVID Hospitals.**

3. Dedicated COVID Hospital (DCH):

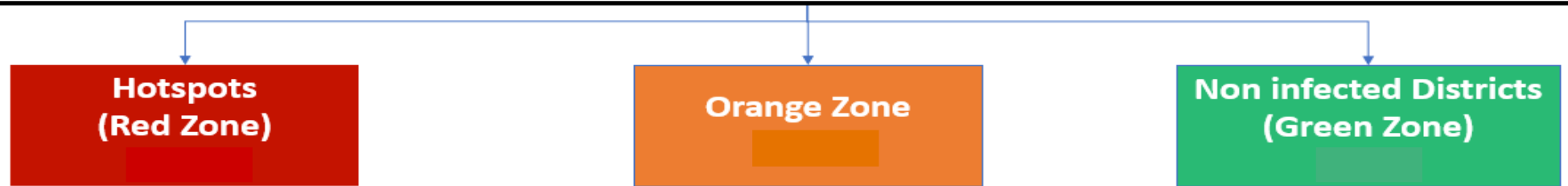
- **Comprehensive care (full hospital or a separate block in a hospital with preferably separate entry\exit) primarily for those who have been clinically assigned as severe.**
- **These hospitals would have fully equipped ICUs, Ventilators and beds with assured Oxygen support.**

All the facilities will have separate areas for suspect and confirmed cases. Suspect and confirmed cases should not be allowed to mix under any circumstances.

MOHFW's containment strategy for COVID-19

MOHFW has categorized districts into: (this is a dynamic status and MOs should refer to their state/district for regular updates)

1. Hotspot Districts (Red Zone)
2. Non-Hotspot Districts (Orange Zone)
3. Non-Infected Districts (Green Zone)



A district currently in **hotspots** can move to **green category** if no new cases arise in 28 days

6

Please refer to MHA classification for updates

<https://www.mha.gov.in/sites/default/files/MHA%20Order%20Dt.%201.5.2020%20to%20extend%20Lockdown%20period%20for%202%20weeks%20w.e.f.%204.5.2020%20with%20new%20guidelines.pdf>

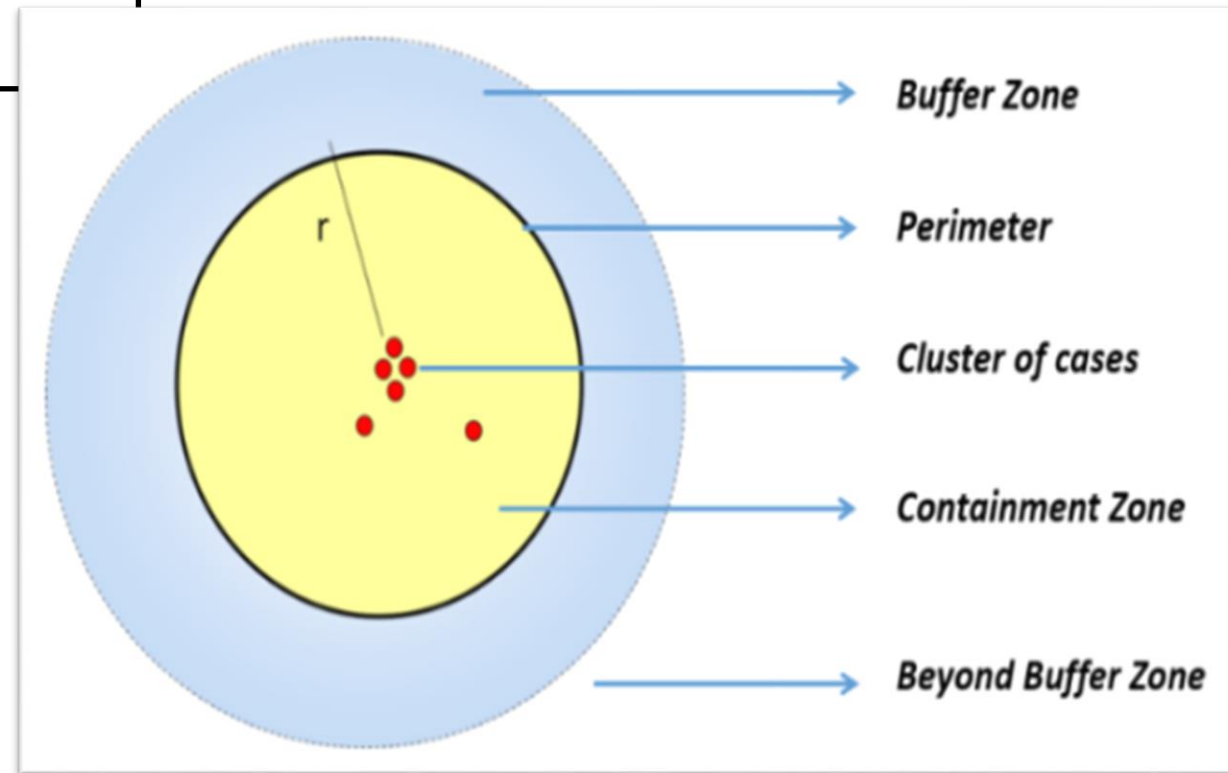
[India's public health response, MOHFW](#)

MOHFW's containment strategy for COVID-19

Within each Hotspot and Non-Hotspot district, areas with COVID-19 cases will be defined as:

1. Containment zone
2. Buffer Zone
3. Areas beyond buffer zone

The strategies adopted by different health programs for service delivery are currently being advised based on where an area lies according to the containment classification.



Isolation and home quarantine

Isolation in a health facility is for:

- All confirmed positive **cases of COVID-19** in order to prevent transmission of infection
- Isolation is for the **period of disease** (ie, till the person tests negative for the disease)

Home quarantine is for:

- All asymptomatic individuals who have undertaken **international travel** from any COVID-19 infected countries or **interstate travel** from any COVID-19 infected state in the last 28 days.
- Home quarantine is for a period of **14 days*** since the day of travel
- All those who fit the **definition of ‘contact’ should be-** home quarantined and monitored for symptoms of COVID-19

A contact in the context of COVID-19 is one who:

- Provided direct care to a COVID-19 positive person without personal protective equipment (PPE)
- Stayed in the same close environment of a COVID-19 patient (including workplace, classroom, household, gatherings).
- Traveled in close proximity (1 m) with a symptomatic person who later tested positive for COVID-19.

*<https://www.mohfw.gov.in/pdf/Guidelinesforhomequarantine.pdf>

(For detailed definition of contact, refer <https://ncdc.gov.in/WriteReadData/1892s/89568514191583491940.pdf>)

Home isolation of very mild/pre-symptomatic cases

However, recent guidelines have been issued by MOHFW for **home isolation of very mild/pre-symptomatic COVID-19 cases**, provided the patient has requisite facility at his/her residence for self-isolation.

Eligibility criteria for home isolation:

- i. Should be clinically assigned as a **very mild case/ pre-symptomatic** case by the treating doctor.
- ii. Should have the **requisite facility at their residence** for self-isolation and also for quarantining the family contacts.
- iii. A **care giver should be available to provide care** on 24 x7 basis. A **communication link** between the caregiver and hospital is a prerequisite for the entire duration of home isolation.
- iv. The care giver and all close contacts of such cases should take **Hydroxychloroquine prophylaxis** as per protocol and as prescribed by the treating medical officer.
- v. Download **Arogya Setu App** on mobile (available at: <https://www.mygov.in/aarogya-setuapp/>) and it should remain active at all times (through Bluetooth and Wi-Fi)
- vi. The patient shall agree to **monitor his health and regularly inform his health status** to the District Surveillance Officer for further follow up by the surveillance teams.
- vii. The patient **will fill in an undertaking** on self-isolation and shall follow home quarantine guidelines. Such individual shall be eligible for home isolation.

For further details, check

<https://www.mohfw.gov.in/pdf/GuidelinesforHomeIsolationofverymildpresymptomaticCOVID19cases.pdf>

Guidelines for home quarantine

Instructions for contacts being home quarantined

The home quarantined person should

- Stay in a well-ventilated single-room preferably with an attached/separate toilet.
- If another family member needs to stay in the same room, it's advisable to maintain a distance of at least one and a half meter between the two.
- Needs to stay away from elderly people, pregnant women, children and persons with co-morbidities within the household.
- Restrict his/her movement within the house.
- Under no circumstances attend any social/religious gathering e.g. wedding, condolences, etc.

Instructions for the family members of persons being home quarantined

- Only an assigned family member should be tasked with taking care of the such person
- Avoid shaking the soiled linen or direct contact with skin
- Use disposable gloves when cleaning the surfaces or handling soiled linen
- Wash hands after removing gloves
- Visitors should not be allowed
- In case the person being quarantined becomes symptomatic, all his close contacts will be home quarantined (for 14 days) and followed up for an additional 14 days or till the report of such case turns out negative on lab testing

Vulnerable populations

Stay at home with physical distancing and other preventive measures:

- All people who do not have history of high risk contact but have **high risk conditions** such as immunocompromised status, heart or lung disease etc.
- All people above age **of 60 years**
- **All these people must be monitored for symptoms of COVID-19 since they are at high risk of getting severe disease if they get infected**

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Role of PHC- MO during COVID-19

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Role of PHC- MO during COVID-19

COVID-19 case finding and referral

PHC facility preparedness for COVID-19

Continuity of essential non COVID-19 health services

Leverage support for managing social disruptions due to COVID-19 from VHNSC, PRIs, MAS etc.

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Role of PHC MO

1. COVID-19 case
finding and referral

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COVID-19 case finding and referral (1/3)*

Community based tracing and monitoring of persons with high risk of infection/contact with COVID-19

- All ASHAs reporting to your PHC **should prepare a list of persons in the community** which will include:
 - People who have travelled to COVID-19 affected countries/areas in past 14 days
 - Those who have come in close contact with a suspected/confirmed COVID 19 patient
- This **list** should be sent to you by CHOs/ ASHA Facilitator/ ANM **on a daily basis**.
- **These people should be advised and explained home quarantine and monitored for symptoms daily.**
- Data of these persons to be captured by FLWs and reported back to PHC in the format as per guidelines available at : <https://main.mohfw.gov.in/sites/default/files/Guidance%20document%20-%20202019-nCoV.pdf>
- **If such individuals develop symptoms suggestive of COVID-19**, FLW should inform you and you should examine and refer them for isolation, testing and treatment. Ensure that **they get tested for COVID-19**.

* There should be slides with roles, responsibilities and actions for PHC MO and other PHC functionaries specific to containment zones

COVID-19 case finding and referral(2/3)

When sending suspect cases of COVID-19 for testing:

- **Call** the state helpline or hot line of IDSP for informing that you are sending a suspected case
- **Facilitate the transport** of the suspect case to the nearest dedicated COVID-19 facility as per severity (refer slide 27,28) by planning in consultation with Block Medical Officer (BMO) or district CMO.
- Transport should be done under proper infection control of the vehicle. Train the ambulance staff on disinfection and PPE use
- **Record** all these suspected cases in the IDSP 'P' form for reporting to District Surveillance Officer as per protocol
- **Inquire** with the District Surveillance Officer/Nodal Officer at the testing facility to confirm that the case got tested
- **Follow up all referred cases** for test result and/or hospital admission.

COVID-19 case finding and referral (3/3)

Advisory for Asymptomatic Contacts:

- **Maintain a list** of all contacts of confirmed case
- **Ensure home quarantine** for 14 days after the last exposure with the case
- **Explain to them that they should monitor themselves** for the development of fever or cough during this time
- **If symptoms develop**, person must put on the mask, self-isolate himself in the home and inform FLW
- **FLW will contact you and you will communicate with the identified Local Health Official/District CMO/DSO** by telephone and arrange for referral for further management
- **Active monitoring** (e.g. daily visits or telephone calls) for 28 days after the last exposure **shall be done by the identified Local Health Officials**

[Ref:https://main.mohfw.gov.in/sites/default/files/Guidance%20document%20-%202019-nCoV.pdf](https://main.mohfw.gov.in/sites/default/files/Guidance%20document%20-%202019-nCoV.pdf)

COVID-19 case finding and referral at the PHC

If you are a Medical Officer in a Containment zone, you will also be in charge of COVID-19 surveillance activities in your area

All patients coming to PHC on their own

Segregate into ARI/ non ARI using **checklist 1**

ARI Patients

Other Patients

Segregate into severe vs non severe cases using **checklist 2**

Severe ARI

Non severe ARI

Check for high risk of contact using **checklist 3**

- Treat as per symptoms

Send to COVID-19 testing center

High risk contact +ve

High risk contact -ve

Check for high risk conditions using **checklist 4**

Send to COVID-19 testing center

High risk condition +ve

High risk condition -ve

- Home based treatment with preventive measures
- ASHA to follow up closely

- Reassure
- Send home
- Ask to come back only if symptoms become severe

As per the latest Guideline of ICMR, all ILI and SARI cases in the containment zone needs to be tested for COVID-19

https://main.icmr.nic.in/sites/default/files/upload_documents/Strategy_for_COVID19_Test_v4_09042020.pdf

As per the latest Guideline of ICMR, all ILI and SARI cases in the containment zone needs to be tested for COVID-19 (https://main.icmr.nic.in/sites/default/files/upload_documents/Strategy_for_COVID19_Test_v4_09042020.pdf).

Therefore the slides may be mended accordingly

Check lists for PHC OPD (1/3)

Check list 1 – to segregate ARI cases from others

Symptoms	Yes	No
Fever		
Cough		
Rhinorrhoea/ runny nose		
Sore throat		
Lost sense of smell (anosmia) and taste (aleukia)		



Check list 2– to segregate severe ARI cases from mild ones Action point: send for testing/hospitalization at DH

Symptoms	Yes	No
Difficulty breathing or shortness of breath after symptoms set in		
Persistent pain or pressure in the chest		
Increased confusion or difficulty in waking up		
Bluish lips or face		
Extreme fatigue		

Check lists for PHC OPD (2/3)

Check list 3: for High Contact Risk – in non severe ARIs. Action point – If Answer is yes to any , send for testing)	Yes/no
Contact with someone in the last 14 days having tested positive for COVID 19	
Direct physical contact with the person being suspected to have COVID 19	
Touched the body fluids (respiratory secretions, vomit, saliva, urine, feces) of a person with suspected COVID 19	
Touched or cleaned the linen/clothes/dishes of a person suspected to have COVID 19	
Having been within less than 1 meter of a suspected COVID 19 case (during travel etc.)	
Contact with someone in the last 14 days having symptoms of severe respiratory illness/admitted for the same	

Taken with acknowledgement from <https://www.georgeinstitute.org.in/covid-19-preparedness-guidancechecklist-for-rural-primary-health-carecommunity-health-settings-in>

Check list for PHC OPD (3/3)

Check list 4: for High Risk Conditions in non severe ARIs with no high risk contact- (Action point – Send home under advice for preventive measures and ASHAs to monitor daily)	Yes/no
Above the age of 60	
Heart disease (such as congenital heart disease, congestive heart failure and coronary artery disease)	
Lung disease including: asthma or COPD (chronic bronchitis or emphysema), tuberculosis , occupational lung diseases like silicosis and people that require home oxygen	
Diabetes Mellitus, Hypertension	
Compromised immune system (immunosuppression) (e.g., seeing a doctor for cancer and treatment such as chemotherapy or radiation, received an organ or bone marrow transplant, taking high doses of corticosteroids or other immunosuppressant medications, HIV or AIDS)	
Blood disorders (e.g., sickle cell disease or on blood thinners)	
On treatment for chronic kidney or liver disease	

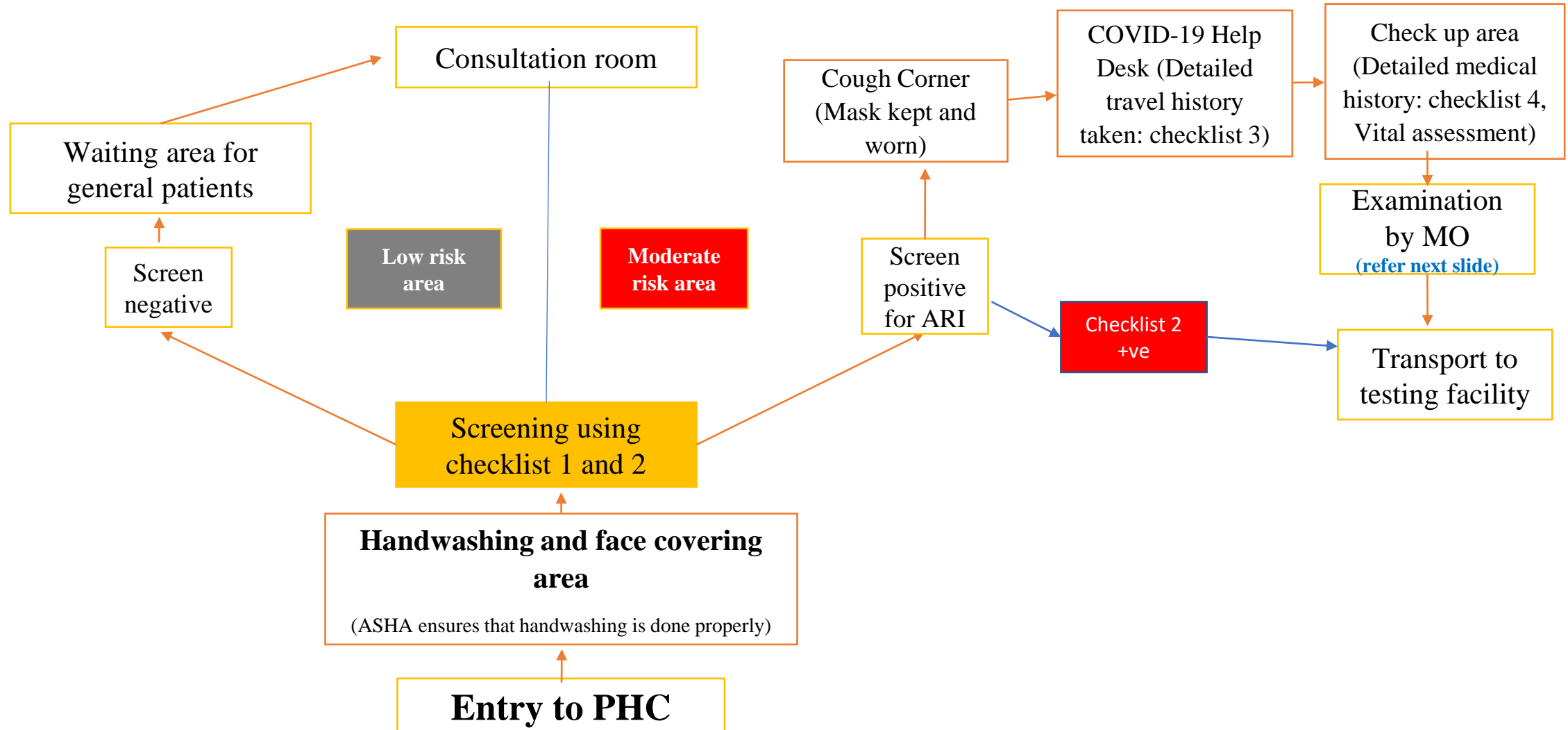
Role of PHC MO

2. Facility preparedness

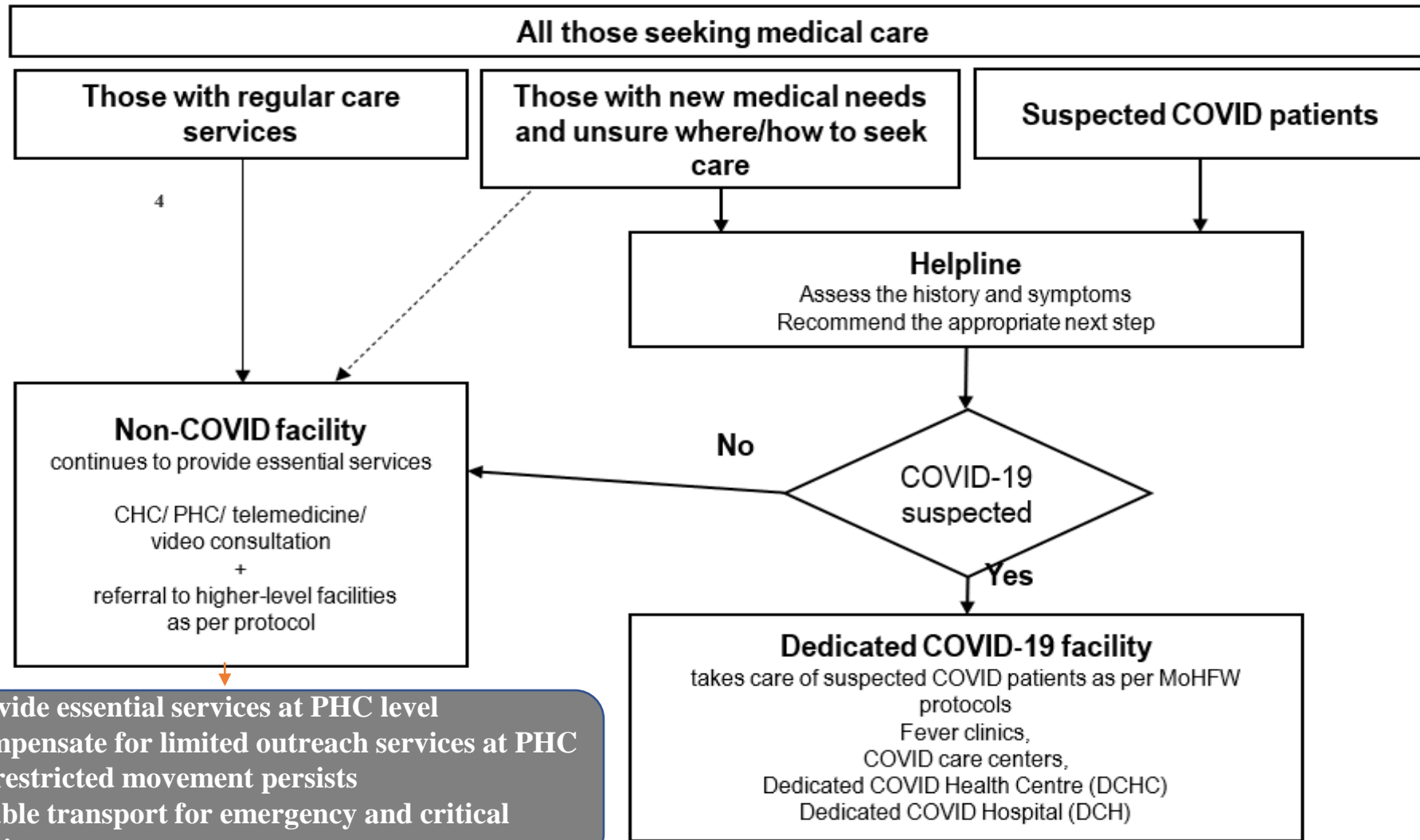
Since the guidelines regarding response to COVID-19 situation as well as routine non-COVID essential service delivery are evolving daily, please visit MOHFW website <https://www.mohfw.gov.in/> regularly for updates

PHC facility preparedness in response to COVID-19 (1/4)

To minimize COVID spread, it is very important that patients coming to PHC go through a process of handwash, covering face with cloth/mask and screening for symptoms and risk history for COVID to minimize COVID



Decide on where to refer patients based on examination by MO* (2/4)



- Provide essential services at PHC level
- Compensate for limited outreach services at PHC till restricted movement persists
- Enable transport for emergency and critical services

Since certain health facilities including FRUs are being designated as COVID-19 facilities

It is important that you **be aware of facilities near you**

- which are providing COVID-19 services
- which are providing non-COVID-19 essential services

so that you can **refer your patients accordingly**.

*patient flow at PHC (as per previous slide)

PHC facility preparedness in response to COVID-19 (3/4)

The PHC setting should be modified **to prevent spread of COVID-19 infection from suspected cases to other patients or healthcare staff.**

You may achieve this by:

- **Assigning a screening desk** at the entrance of PHC for segregating all patients into COVID-19 suspects and non suspects according to the checklist (low risk of COVID-19 – all non ARI cases, and ARI cases with checklist 2,3 and 4 negative)
- **Assigning designated staff** for the screening desk
- **Assigning separate waiting areas** for suspected cases of COVID-19 and other patients
- **Assigning separate examination areas** for suspected cases of COVID-19 and other patients at low risk for COVID-19
- **Arranging for safe physical distancing in screening and waiting areas** between patients in waiting area and between patients and PHC staff, as much as possible
- **Teaching the staff to following all necessary Personal Protective Equipment (PPE) wearing protocols and personal hygiene practices** : especially hand wash after every potential contact with patients, their secretions, linen etc.
- **Monitoring the staff and yourself for symptoms and getting tested as soon as symptoms develop**

PHC facility preparedness in response to COVID-19 (4/4)

You should ensure the following **infection prevention protocols** at the PHC:

- **All health care workers including frontline workers are to be trained** in standard protocols for Infection Prevention Control and should adhere to advisories for infection prevention, personal protection and physical distancing norms, for facility level care, outreach visits or home-based care.
- **Disinfection of floors and surfaces should be done at least twice a day** by cleaning with 1% sodium hypochlorite solution. This includes entrance area, screening area, registration desk, waiting area, consultation area, designated area for suspected COVID-19 cases, laboratory, pharmacy, etc.
- **Disinfection of ambulances transporting suspected COVID-19 cases** after every visit
- **Biomedical waste management** with special focus on disposal of PPE.
- **Separate handwashing area** with availability of soap or liquid handwash.
- **Hand sanitizers and hand wash** should be available for use at the PHC.

For a detailed video on infection prevention protocols: please see the video:
https://drive.google.com/file/d/17oCqHqPM4-b23YlW6tVQtUe_dRUh6VmP/view?usp=sharing

Role of PHC MO

3a. Redesigning service delivery

Since the guidelines regarding response to COVID-19 situation as well as routine non-COVID essential service delivery are evolving daily, please visit MOHFW website <https://www.mohfw.gov.in/> regularly for updates

Redesigning service delivery at PHC to ensure essential routine health services(1/5)

- Even though the healthcare system is currently largely focused on delivery of services related to COVID-19, we have to try and ensure that the disruption to routine health services are minimized.
- Though we are in the middle of the COVID-19 pandemic, if routine essential services are neglected, it might lead to increased mortality from vaccine preventable diseases, non-communicable diseases, vector borne diseases, chronic diseases like tuberculosis, maternal and neonatal deaths, etc.
- Particular attention needs to be paid to the delivery of essential health care for specific population sub-groups, while ensuring the safety of health workers.
- It is also helpful to ensure that all health workers are provided with valid passes/identity cards to facilitate smooth service delivery during the period of lockdown/restricted movement.

Redesigning service delivery at PHC to ensure essential routine health services(2/5)

➤ **Care should be taken to continue health care delivery to all the people in your PHC area. However, you must ensure that you prioritize the following sub-population groups-**

- Pregnant women with EDD in current month,
- High-risk pregnant (HRP) women, Newborns
- Children due for immunization,
- Children with SAM (severe or acute malnourishment),
- Patients on treatment for TB, leprosy, HIV and viral hepatitis,
- Patients with hypertension, diabetes, COPD, mental health, etc,
- Patients undergoing planned procedures (dialysis, cancer treatment and scheduled blood transfusions, etc.)

Redesigning service delivery at PHC to ensure essential routine health services(3/5)

OPD services

- **Continue PHC OPD** with facility and staff preparedness as discussed in above slides
- **Use telehealth services** such as phone or video consults for patients with minor ailments and encourage general public to use tele health help lines and platforms (the MPW could assess the situation and enable tele-consultation with you)
- **Use Mobile Medical Units** for follow up care for RMNCHA, chronic communicable and non-communicable diseases under full infection prevention and distancing protocol and precautions

Services given through VHNDs and by Anganwadis

These services (immunization, antenatal care, screening for common NCDs/communicable diseases etc.) will stay affected till there is restrictions on movement and gathering, so

- **Develop plans with your Frontline worker team to deliver these services at the PHC/SHC/HWC**
- **ASHAs/FLWs should create awareness in the community about change in schedule** and mobilize beneficiaries in small batches of 4-5 per session to avoid crowding and ensure physical distancing norms

Redesigning service delivery at PHC to ensure essential routine health services(4/5)

Emergency and critical services

- **Map FRUs for obstetric and neonatal services** (BeMONC/CeMONC/ Sick new born care), emergency child services, **NCD related emergencies** (heart attack, stroke etc.) **and communicable disease related emergencies** (severe diarrhoea, severe malaria, shock etc.). Identify both dedicated COVID-19 as well as non COVID-19 FRU facilities near you, so that you can make appropriate referrals.
- **Proactively set up referral and transport mechanisms for people requiring critical services:** dialysis, cancer care, blood transfusion for conditions such as sickle cell anemia, thalassemia,

Redesigning service delivery at PHC to ensure essential routine health services(5/5)

Home Visits

- **Orient ASHAs to optimize Home-visits by planning and providing follow up care to all beneficiaries** in a particular household/hamlet during one visit and avoid making repetitive visits to the same house. – i.e pregnant, lactating women, newborns, under fives, and elderly in same household.
- In case of any complications, SHC team should first contact you via phone or the tele-medicine or helpline, as appropriate and seek guidance about referring the patient
- During home visits, ASHAs should be alert to the possibility of increased gender based violence and inform you. You should support the victim to access appropriate health and social services

Ensuring supply of medicines and consumables

- Make and estimate of requirement and ensure supplies for three months, if possible, for medicines for RMNCH services, communicable diseases including those under national programmes, diabetes, hypertension, epilepsy etc. as well as consumables (an illustrative list attached in slide no. 62

Role of PHC MO

**3b. Continuing
essential non COVID-
19 services**

Since the guidelines regarding response to COVID-19 situation as well as routine non-COVID essential service delivery are evolving daily, please visit MOHFW website <https://www.mohfw.gov.in/> regularly for updates

Continuing the essential non COVID-19 PHC activities (1/10)

RMNCH+A Services

Family Planning Services and Safe Abortion services

- Ensure that eligible couples receive contraceptives (Condoms/ Oral Contraceptive Pills MALA/Chhaya, Injectable Contraceptive Antara /Emergency Contraceptives) through doorstep delivery by ASHA or at facility (SHC/PHC).
- Display information about delayed availability of IUCDs and sterilization services until routine services resume at the PHC. Counsel such individuals to adopt temporary methods and ensure provision: Condoms /OCP/ injectable etc. in the interim period.
- Refer those who need medical and surgical abortion services to appropriate facility level. Ensure appropriate infection prevention measures including counselling for post abortion care and provision of contraception.

Ante natal services

- High Risk Pregnancy tracking and follow up
 - Ensure you receive list of high risk pregnancies from ANMs and ASHAs for follow up of HRPs to ensure early detection of complications and referral.
 - ANC during the last trimester should be prioritized.
 - Telephonic contact should be made by ASHAs / ANMs to HRPs during last trimester to ascertain status and home based follow up to be provided if necessary.

Continuing the essential non COVID-19 PHC activities (2/10)

RMNCH+A Services

- Routine antenatal services

- In view of need for physical distancing, Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) and Village Health, Sanitation and Nutrition Day (VHSND) activities, which involve large gathering of beneficiaries could be suspended during the lockdown/restrictions.
- However, you will continue to provide ANC services on walk in basis as per standard protocols at the PHC following physical distancing norms.
- Ensure enough availability of TD/ IFA/ Calcium for all pregnant women in your area during ANC period.

Intrapartum Services

- Ensuring safe institutional delivery

- Maintain due list of all pregnant women with Expected Date of Delivery (EDD) up to next three months (last trimester) at PHC level for active follow up.
- Ensure availability of Misoprostol and disposable delivery kits for clean deliveries at home with ASHAs if needed but encourage appropriate referral as per MoHFW guidelines for institutional delivery.
- Link each pregnant woman with the appropriate health facility for delivery (as per antenatal status and doctor's advice). Pregnant women suspected/positive COVID-19 in third trimester should be referred to designated COVID delivery facility/CEmONC for delivery and further management.
- Be aware of functional and staffed CEmONC centres where HRP and women who develop complications are to be shifted.
- Dedicated ambulances for COVID-19 and non COVID-19 patients will be available at the district/ block level. Ensure that non COVID-19 patients are transferred in non COVID-19 ambulances only.

Continuing the essential non COVID-19 PHC activities (3/10)

RMNCH+A Services

Management of Pregnant Women with suspected/ confirmed COVID 19

- If any pregnant woman is confirmed or suspected COVID-19, ensure that she is rapidly moved to either a dedicated COVID-19 facility or a health facility which has an isolation room in maternity wing and is linked with COVID-19 testing facilities. Be aware of the nearest dedicated COVID delivery facilities/CEmONC for referral.
- Dedicated COVID-19 ambulance only must be used to transport such women. You must follow up with the COVID-19 referral facility regarding her management/isolation status/test results.
- Various guidelines issued by MoHFW / ICMR guidelines for management of COVID-19 suspects/ cases must be followed.

Detailed FAQs on COVID-19, pregnancy, childbirth and breastfeeding have been published by WHO and can be accessed at <https://www.who.int/news-room/q-a-detail/q-a-on-covid-19-pregnancy-childbirth-and-breastfeeding>.

Postpartum services

- Ensure availability of IFA and calcium tablets during PNC period.
- In case of home deliveries, immediate visits to be made by ANM or CHO (where available) to assess the health of the woman and new-born. Facilitate timely referral in case of any complication using the dedicated non-COVID ambulances (102/Janani Express).

Continuing the essential non COVID-19 PHC activities (4/10)

RMNCH+A Services

Visit [link](#) for recent immunization guidelines

Child Health

- Immunization services (including for pregnant women)
 - Birth doses for institutional deliveries to continue uninterrupted as these beneficiaries are already in the health facilities.
 - You will provide immunization services at PHC for walk-in beneficiaries, maintaining physical distancing measures and appropriate infection control precautions. Subsequent vaccination could be provided at SHC or additional outreach sessions.
 - You will assess whether immunization services through outreach sessions can be held in a way that safety of health workers and community is not compromised.
 - Catch-up vaccination should be conducted as soon as the restriction is eased. This will require tracking and follow-up with individuals who missed vaccinations.
 - Mass vaccinations should not be undertaken until restriction is lifted
- Management of SAM children
 - During period of restriction, new admissions may be allowed only in Nutritional Rehabilitation Centres (NRC), where adequate supervisory and medical staff are available. SAM children with medical complications will be referred to you by FLWs for medical management. For secondary care, you may refer the sick SAM children to the DH/Medical college.
 - You will maintain a list of SAM children (discharged from NRC) and share it with Anganwadi centres for prioritizing home-based delivery of Take Home Ration.
 - Follow up to be done telephonically and only children with medical complications to be called for physical follow up.

Continuing the essential non COVID-19 PHC activities (5/10)

RMNCH+A Services

Child Health

- New Born Care/Childhood illness management

- ASHAs will continue Home-based new-born care visits, following all precautions. Adequate and appropriate COVID protective equipment should be provided to ASHAs to protect themselves and to prevent infecting others. Breast feeding practices to be promoted with early initiation of breast feeding and Kangaroo Mother Care as per MAA/KMC guidelines.
- Admission to SNCU and NBSU will be continued as per existing guidelines.
- Instead of undertaking visits for Home Based Young Child Care, during the period of the lockdown/restriction, ASHAs may contact the family telephonically to assess health status of the child, especially for cough, cold, fever, breathlessness and diarrhoea. In case of any complication in new-born or young child or any childhood illness, ASHAs will consult you for appropriate referral and management advice.
- You will ensure adequate supply of ORS, Cotrimoxazole, Gentamycin, and Amoxicillin at the PHC, including HWCs.
- You will refer any case of suspected COVID-19 infection in children to nearest COVID-19 management facility and arrange for referral transport.

Adolescent Health

- Three months' supply of weekly iron folic acid supplementation tablets may be dispensed by ASHAs /AWWs for community distribution to adolescent boys and girls.

Continuing the essential non COVID-19 PHC activities (6/10)

Communicable diseases

Vector borne diseases

- You will ensure that activities such as distribution of Insecticide Treated Nets (ITN) in targeted areas are resumed after the lockdown. Use of Long lasting Insecticidal Nets (LLIN) provided in high malaria endemic areas should be promoted.
- Ensure that Targeted Indoor Residual Spraying (IRS) in high risk vector borne diseases endemic areas or wherever increase in cases is seen, is undertaken after the lockdown. IRS teams should ensure supply of sanitizers/soap and water at all operations sites, enable health checks for all team members, and use personal protective equipment.
- Continue enhanced fever surveillance and use of rapid diagnostic kits for malaria diagnosis. Watch for admissions in dengue cases and other vector borne diseases. Arrange to undertake antilarval and anti-fogging measure after the lockdown.

Tuberculosis

- You will maintain a list of all TB patients at the PHC.
- You will ensure delivery of DOTS to TB patients, closer to the community, with minimum or no travel – can be done through ASHAs/ ANM/ volunteers
- Routine screening for presumptive TB cases to continue at primary level facilities with diagnostic services to be provided uninterrupted at designated facilities as per advisories issued by National Tuberculosis Elimination Programme.

Continuing the essential non COVID-19 PHC activities (7/10)

Communicable diseases

Leprosy

- Ensure that all Leprosy patients are provided with uninterrupted drug supplies through FLWs, including ASHAs Viral Hepatitis, to ensure continuity of treatment
- Ensure that patients on antiviral treatment for hepatitis are dispensed with medicines for 3 months during the period of restriction. You will submit a list of patients undergoing treatment for Hepatitis C to the district administration so that patients/attendants can collect the medicines during the time restrictions are in place or duration of the outbreak.
- In some cases, States could alternatively make medicines available to the patients, through ASHAs, MPHs, volunteers or courier/ postal services, coordinate in such cases.

HIV

- You will maintain a list of PLHIV in your PHC area. They will receive three month long multi-month dispensation of ART through Anti-retroviral treatment (ART) center, Link ART center and facility-integrated ART center.
- Coordinate with NACP Nodal officers to ensure dispensation of commodities such as condom, needle and syringe, etc. to HRGs during the period of lockdown/restrictions
- Coordinate for strategies like community dispensation of commodities (through Care and Support Centers, home delivery through out-reach workers, volunteers, PLHIV networks) and family dispensation.

Continuing the essential non COVID-19 PHC activities (8/10)

Non Communicable diseases

Care for Hypertension, Diabetes, COPD and other NCDs

- Ensure that all known/ diagnosed patients of Hypertension, Diabetes and COPD receive regular supply of medicines for up to three months through ASHAs or SHCs on prescription.

Dialysis and Cancer treatment services

- Maintain a list of all patients requiring regular dialysis in your PHC area and work with District hospitals to organize appointments via telephone for next two months.
- In case of patients, who cannot afford private vehicles, RBSK vehicles can be used for facilitating transport of patients.

Care for elderly/ disabled and palliative care patients

- Ensure that list of patients/ individuals who need extended support are maintained at the SHC level for regular follow up. ANMs or CHOs will undertake two visits per month to such households during the period of the outbreak, to assess for onset of complications and to monitor treatment adherence. ASHAs will maintain telephonic contact with these patients and their families and will refer them to you if needed. Undertake screening for new onset fever/cough/breathlessness and risk communication on COVID-19 in this sub group.

Continuing the essential non COVID-19 PHC activities (9/10)

Non Communicable diseases

Blood disorders

- **Maintain a list** of all patients with blood disorders (thalassemia, sickle cell diseases, and haemophilia) and those who require regular blood transfusion in your PHC area.
- **Coordinate with blood bank/hospital** for transfusion appointments. The requisite units required for transfusion must be communicated to the blood bank in advance (preferably three days), and availability of blood verified.
- Thalassemia and sickle cell disease patients could enter their requirement of blood in **e-raktkosh**, specifying a particular blood unit and particular hospital blood bank.
- **Be aware of facilities designated** for blood disorder patients near your PHC.
- Patients requiring blood transfusion or (Anti haemophilic factor) infusion **should be advised to also carry their identity cards and the hospital approval, outpatient cards** to facilitate easy movement. The hospitals are requested to issues passes for these patients as well.

Continuing the essential non COVID-19 PHC activities (10/10)

Emergency and critical care services

- **Be aware of FRUs for obstetric and neonatal services** (Caesarian Section, Sick new born care), emergency child services, **NCD related emergencies** (heart attack, stroke etc.) **and communicable disease related emergencies** (severe diarrhoea, severe malaria, shock etc.). This includes both dedicated COVID-19 as well as non COVID-19 hospitals/FRUs and refer accordingly
- **Dedicated 108 / ALS ambulance** is available in every district for management of emergencies pertaining to cardiac / trauma / burn / medical and surgical emergencies etc. Separate ambulances are available to transport COVID-19 positive/suspect cases. Coordinate with the district for ambulance if required
- Address **victims of sexual and physical violence** as per protocols. Information about support services under social welfare departments, NGOs, One stop crisis centres and helplines should be provided to the victim for long term support.

Ensure availability of essential medicines and supplies at PHC

Below is a tentative list of medicines and supplies that you have to try and keep available at the PHC for uninterrupted health services

1. Paracetamol
2. Cetirizine
3. Triple layer surgical masks
4. N95 respirator masks
5. Gloves
6. Hand sanitizer
7. Soap or handwash liquid
8. Colour coded bags and containers for BMW
9. Hydroxychloroquine tablets*
10. DOTS medicines as per number and types of TB patients
11. IFA tablets
12. Calcium tablets
13. Albendazole
14. Antihypertensive medicine
15. Diabetes medicine: Oral hypoglycemic agents and insulin
16. Contraceptives (CC/ OCP/Antara/EC pills)
17. Anti epilepsy medicines as per Essential Drug List
18. Pregnancy testing kits
19. ORS packets, Zinc syrup & tablets, Cotrimoxazole tablets, inj Gentamycin, Amoxicillin syrup & tablets
20. All vaccines under UIP
21. 1% sodium hypochlorite solution
22. Bleaching powder, chlorine tablets
23. Malaria RDT
24. Antimalarial drugs
25. Other drugs and kits as per National Programmes

Do need assessment for next 3 months and indent timely

*Hydroxychloroquine has been recommended for prophylaxis against COVID-19 for high risk population

<https://www.mohfw.gov.in/pdf/AdvisoryontheuseofHydroxychloroquinasprophylaxisforSARSCoV2infection.pdf>

Role of PHC MO

4. Social impact management

Since the guidelines regarding response to COVID-19 situation as well as routine non-COVID essential service delivery are evolving daily, please visit MOHFW website <https://www.mohfw.gov.in/> regularly for updates

Gathering support for managing social disruptions due to COVID-19

- Orient **FLWs on tracking migrant group settlements** with regard to travel history and follow up for symptoms of COVID-19.
- Sensitize FLWs that **informal reporting of these issues in the localities** will help the vulnerable greatly and follow up with them on this regularly
- Keep **District Magistrate's Office informed** about issues related to vulnerable groups especially food, water and access to healthcare
- **Mobilize resources through DM's office** to enable availability of essentials like food and water and transport facilities to such families till restrictions of movement are lifted.
- Links for **coordination to also be established with District CMO, District Surveillance Officer, Nodal Officer at designated Testing Facility, Officer for coordination of transport services**, etc.
- Coordinate with **VHSNC and MAS** to plan community level activities for COVID 19 response. Seek their support in gathering information, IEC activities, use of untied funds etc.
- **Seek support** from PRI/ ULB to locate and support marginalized and vulnerable groups especially migrants in respective villages/ wards .
- Coordinate with **Rogi Kalyan Samiti** members and plan for **utilization of untied / RKS funds to meet gaps in supplies of consumables / medicines at PHC level**

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Annexure

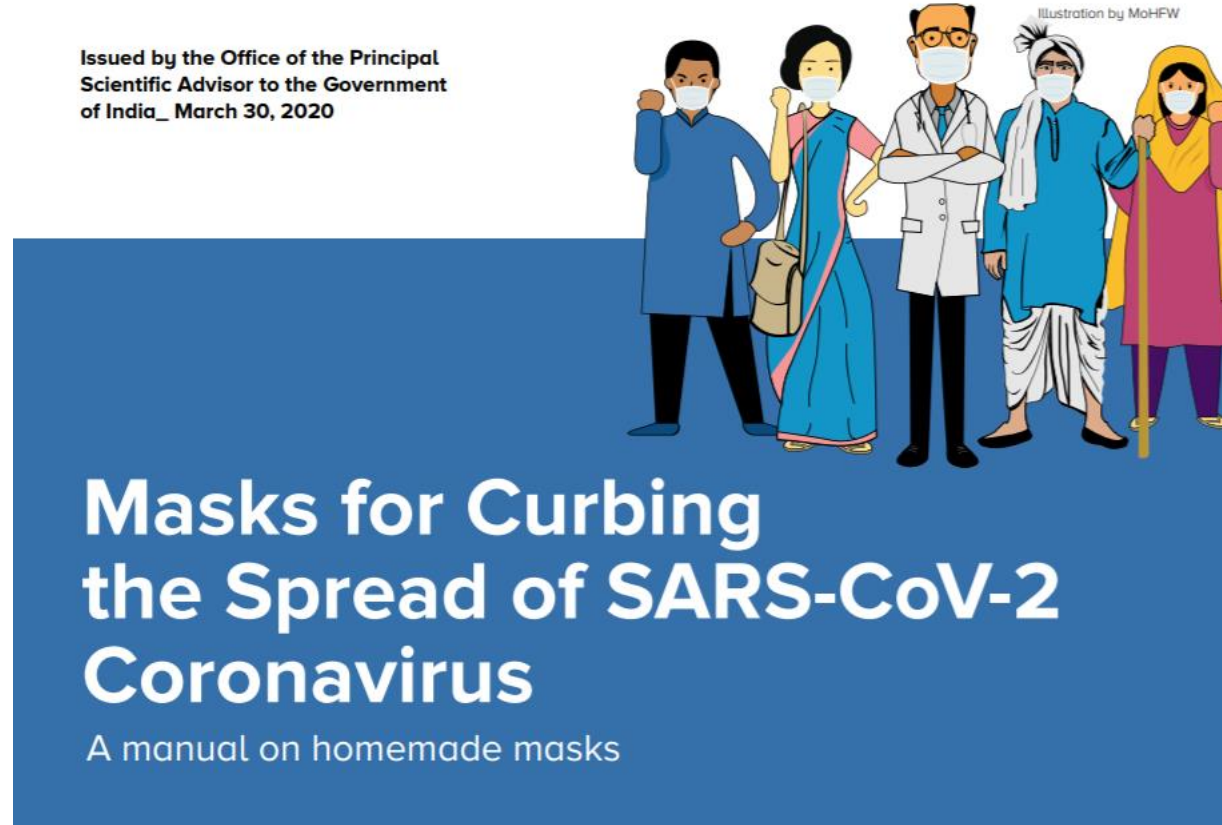
HealthCare workers should wash hands after performing the following procedures

1. Examining patient/checking patient's temperature
2. Inserting IV cannula/drawing blood sample
3. After contact with patient's body fluids/secretions
4. Administering any injection to patient
5. Contact with the patient's bed/linen etc.



Home made Masks

- Homemade masks can also be used effectively as per latest guidance document.



- Please refer to [PSAManualonMasks_PIB_FINALpdf.pdf](#) for more details

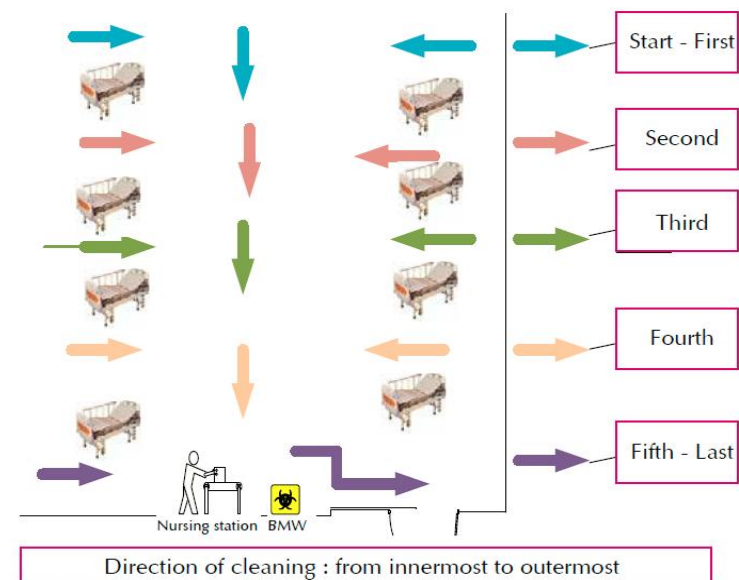
Disposal of used masks

- Used masks should be considered as potentially infected medical waste and disposed of in any of the following ways:
- In the hospital setting it should be disposed off in the identified infectious waste disposal bag/container.
- In community settings where medical waste management protocol cannot be practiced, it may be disposed off either by burning or deep burial.
- During home care, patients and contacts using triple layer mask should first disinfect used mask with ordinary 5% bleach solution or 1% sodium hypochlorite solution and/or quaternary ammonium household disinfectant and then dispose off either by burning or deep burial.

Reference: Directorate General of Health Services (EMR Division). Novel Coronavirus Disease 2019 (COVID-19): Guidelines on rational use of Personal Protective Equipment [Internet]. DGHS, MOHFW, GOI 2020 [cited 25 March 2020].
<https://www.mohfw.gov.in/pdf/GuidelinesonrationaluseofPersonalProtectiveEquipment.pdf>

Cleaning of PHC environment

- Perform wet mopping only using 1% sodium hypochlorite
- Perform unidirectional mopping
- Clean as and when required or at least when in each shift



Environmental Cleaning

- **After mopping, disinfect the mop using 1% sodium hypochlorite and then wash it using soap and water**
- **Dry the mop by keeping it upside down**
- **Ensure periodic (at least twice a day/shift wise) cleaning of table, shelves, IV stands, equipment etc. using 1% Sodium Hypochlorite.**
- **Use 70% Iso- Propyl Alcohol (spirit) for cleaning Xray View box, Monitor etc.**

Environmental cleaning

- **For Linen -**
 - **Machine washing with warm water at 60–90° C. The laundry can then be dried according to routine procedures.**
 - **If machine washing is not possible, linens can be soaked in hot water and soap in a large drum using a stick to stir and being careful to avoid splashing.**
 - **The drum should then be emptied, and the linens soaked in 0.05% chlorine for approximately 30 minutes.**
 - **Finally, the laundry should be rinsed with clean water and the linens allowed drying fully in sunlight.**
- **Follow proper hand hygiene after every work/procedure.**

Biomedical Waste management

- **Keep separate colour coded bins/containers (labelled as 'COVID-19') in wards and maintain proper segregation of waste as per Bio Medical Waste Management (BMWM) Rules.**
- **As precaution double layered bags (using 2 bags) should be used for collection of waste from COVID-19 isolation ward.**



Biomedical Waste management

- In addition to mandatory labelling bags/containers used for collecting BMW from the COVID-19 wards, should be labelled as “COVID-19 Waste”.
- Keep COVID -19 labelled waste separately temporary storage room prior to handing over to authorised staff of CBMWTF.



Biomedical Waste management

- Maintain separate record of waste generated from COVID-19 isolation wards.
- Use dedicated trolleys and collection bins in COVID-19 isolation wards. A label "COVID-19 waste" to be placed on these items also.
- The (inner and outer) surface of containers/bins/trolleys used for storage of COVID-19 waste should be disinfected with 1% sodium hypochlorite solution.
- Depute dedicated sanitation workers separately for BMW and general solid waste so that waste can be collected and transferred timely to temporary waste storage area.



Other useful tips

- Try to Follow physical (social) distancing when in group of co-workers or family members.
- Clean and wash your linen with bleaching powder after hospital work.*



* Check if bleaching powder is appropriate as it would bleach the clothes too?