# AUDIT OF INFRASTRUCTURE OF HOSPITAL

Part A



### 1. Facility provides adequate illumination level at patient care areas

- Adequate illumination in ward
- Adequate illumination in nursing station
- Adequate illumination in open area at night
- Adequate illumination in circulation area(Stairs, corridor and waiting area)
- Adequate illumination in toilets



S.No	Area	Illumination level
1	General lighting (wards)	100 lux
2	Nursing stations	150-300 lux
3	Night lighting	1 lux
4	Examination light (in ER)	1000 lux
5	Stairs & corridors	100 lux (in evening 1 lux (in night)
6	<b>Reception &amp; Waiting Room</b>	150 lux
7	Casualty & OPD department	150 lux
8	Toilets	Atleast 100 lux

#### 2. Facility has security system in place at patient care areas

Hospital has in-house/outsourced security system in place



# 3. Hospital infrastructure is adequately maintained

- Patient beds are not rusted and are painted.
- Availability of clean and intact bed-sheet & mattresses
- Window and doors are maintained
- Hospital has system for periodic maintenance of infrastructure at defined interval



#### 4. Facility has adequate arrangement storage and supply for portable water in all functional areas

Hospital has adequate water storage facility as per requirements (450-500 Litres per bed per day )

Hospital has adequate water supply from municipal/underground source

All water tanks are kept tightly closed

Periodic cleaning of water tanks carried out (Records of cleaning is maintained)

Hospitals periodically tests the quality of water from the source (municipal supply, bore well etc) for bacterial and chemical content

RO/ Filters are available for potable drinking water

Hospital ensures that the distribution pipelines are not running in close vicinity of the sewage system.

# 5. Facility ensures adequate power backup in all patient care areas as per load

- Availability of noiseless generators for power back up
- Estimation of power consumption of different department of hospitals is done
- Generator has adequate capacity to provide 24x7 power back at least critical areas
- Use of energy efficient bulbs for light

# 6. Patient care areas are clean and hygienic

- Adequate Cleanliness in open area
- Adequate Cleanliness in circulation area(Stairs, corridor and waiting area)
- Adequate Cleanliness in toilets
- Adequate Cleanliness in Indoors
- Adequate Cleanliness in Outdoors
- General waste from hospital is removed
   daily by municipal/outsourced agency



#### 7. Critical areas of the facility ensures availability of oxygen, medical gases and vacuum supply

- Oxygen Generation Plant
- Manifold room is located on ground floor
- Manifold room has adequate stock of Oxygen and Nitrogen Cylinders
- Cylinders banks are in duplicate for Emergency
- Alarm system has been provided to indicate any abnormal pressure change
- There is procedure for prompt replacement of empty cylinders with filled cylinders (Emergency)
- There is a procedure for periodic checking of all terminal units for malfunctioning

## PART B

S.No	Description	Avail able	Functio nal	Non- Fu	Re	
				Reparable	Non-Reparable	ma rk
1	Beds					
2	IV stands					
3	Bed side locker					
4	Attendant Bench					
5	Ceiling Fan					
6	Air Conditioner					
7	Air Cooler					
8	Water Cooler					
9	<b>RO/Water Filter</b>					
10	Wheel Chair					
11	Pt Trolley					
12	Bed Sheets					
13	Generator Set For Power Supply					

## CHECKLIST FOR CLINICAL LABORATORIES PERFORMING SAMPLING AND PCR TESTING FOR COVID-19

#### **PRE-ANALYTICAL REQUIREMENTS**



### **Triage and Patient reception**

Criterion	Yes	NO
TRIAGE/ SCREENING AREA		
There is a dedicated area for screening of COVID-19 patients located outside the facility; alternatively this area has a specific entry site separate from other facility entry sites.		
A clinical triage is set for <u>early</u>		
identification of patients with acute		
respiratory infection (ARI) to prevent the		
transmission of pathogens to health care		
workers and other patients.		
These equipment are present in the Triage area:		
<ul> <li>Screening questionnaire</li> </ul>		
Algorithm for triage		

· PPEs	
Hand hygiene sanitizer (alcohol rub)	
Infrared thermometer	
• Waste bins and access to cleaning/disinfection	
Triage area is secured by glass or plexiglass to protect <u>healthcare workers</u> who perform preliminary screening from <u>patients to be screened.</u>	
Adequate space for triage is ensured.	
Medical masks are distributed to all patients to be screened while waiting for Triage.	
Patients with ARI symptoms are immediately moved to an isolation room away from others.	
At least 2m distance is ensured between patients to be screened.	

## At least 2m distance is ensured between waiting room chairs; alternatively back-to-back chairs are set.

Contact and geographic information, history of clinical symptoms, recent travel, and possible exposure to suspected or confirmed COVID-19 patients are collected and filled in the screening questionnaire.

There is clear signage for symptoms and directions.

Triage area is well aerated and regularly cleaned and disinfected.

#### **Standard and Additional Precautions**

Criterion	Yes	NO
Laboratory staff are trained for hand and respiratory hygiene precautions and usage of PPE according to risk.		
There is a <u>dedicated area</u> for Donning / Doffing before and after specimen sampling and handling.		
Laboratory staff are familiar with Dressing/ Undressing phases and sequential steps.		
Sequence of Donning PPE is followed: Hand hygiene		
applied gown worn à mask/respirator applied à goggles/ face shield worn à first and second pair of gloves worn.		
Sequence of Doffing PPE is followed: First pair of gloves removed à goggles/face shield removed à gown removed à mask/respirator removed à second pair of gloves removed à hand hygiene applied.		
All used PPEs and paper towels are discarded inside a waste container (yellow biohazard bag) in the anteroom if available otherwise on the way to the door.		
Written procedures are available for standard and additional precautions		

### **Specimen Sampling**

#### Criterion

Yes NO

#### **INPATIENT/ OUTPATIENT SETTING:**

For nasopharyngeal or oropharyngeal aspirates or washes, nasopharyngeal or oropharyngeal swabs, <u>the healthcare worker uses the following</u> <u>PPEs:</u> medical mask, eye protection (goggles or face shield), clean, non-sterile, long-sleeved gown (+apron) and gloves.

**INPATIENT SETTING:** 

For <u>aerosol-generating procedures</u> (e.g., tracheal intubation, non-invasive ventilation, tracheostomy, cardiopulmonary resuscitation, manual ventilation before intubation, bronchoscopy), <u>the healthcare worker uses the</u> <u>following PPEs</u>: respirator (N95, FFP2 or equivalent standard),eye protection (goggles or face shield), clean, non-sterile, long-sleeved gown (+apron) and double pair of gloves. At least the apron and the gloves are changed between two consecutive patients to be sampled.

Procedures are performed in an adequately ventilated Room OR negative pressure rooms with at least 12 air changes per hour OR controlled direction of air flow when using mechanical ventilation.

A triple packaging ensures specimen protection during transportation.

The external surface of the transport box is wiped with a disinfectant and handled to the person assigned for specimen transportation.

#### **Biosafety Precautions**

Criterion	Yes	NO
Initial processing of all specimen take place in a validated		
class II Biological Safety Cabinet (BSC), e.g. manual opening		
of container of respiratory sample, tube vortexing, etc.		
Appropriate personal protective equipment (PPEs) are used		
when working with clinical specimens.		
Double pair of disposable gloves and a respirator (N95, FFP2)		
or equivalent standard) are used.		
<b>Diagnostic laboratory procedures</b> (nucleic acid amplification		
tests) follow Biosafety Level 2 (BSL-2) guidelines		
implemented by the institution.		
Limited number of personnel is allowed to be present in the		
Biosafety Level 2 (BSL-2) area.		
Technical procedures are performed in a way that minimizes		
generation of aerosols and droplets.		
The class II Biological Safety Cabinet (BSC) is cleaned after		
use with a virucidal detergent-disinfectant as per		
manufacturer's recommendations (in compliance with the		
concentration and contact time).		
Written procedures are available for all biosafety rules and		
technical operations.		

# TRANSPORT AND STORAGE CONDITIONS

#### Criterion

The personnel who transport specimens from suspected or confirmed COVID-19 patients are trained in safe handling practices and spill decontamination procedures.

Specimen are labelled and transported as 'Biological Substance Category B'.

Specimen from URT (nasopharyngeal and oropharyngeal swabs):

- tubes. The transport medium or Saline
- Stored at 2-8°C for up to 5 days (VTM).
- Stored at 2-8°C for up to 72 hours (Saline).

A triple packaging ensures specimen protection during transportation.

- Primary container: absorbent packaging material, water-tight and leak-proof
- Secondary container: durable, water-tight and leak-
- , contains absorbent material (cushions)

Outer container : protects contents from physical damage and water while in transit

When a specimen is received from an external laboratory, the external surface of the transport box is disinfected.



S.No.	Name Of Test	Avail	able	Remark	
		Yes	No		
1	RTPCR				
2	CBC				
3	D-DIMER				
4	RBS				
5	ECG				
6	HBA1C(If Diabetic)				
7	X-RAY CHEST				
8	S. ELECTROLYTE				
9	RFT				
10	S.URIC ACID				
11	LFT				
12	CRP				
13	S.FERRITIN				
14	S.LDH				

15	BLOOD CULTURE		
	(If Count is Vary High)		
16	TROP-I		
17	TROP-T		
18	PT-INR		
19	ABG		
20	S.CORTISOL		
21	S. Mg 2+		
22	S. Ca 2+		
23	S. Lactate		
24	CEP-QUANTITATIVE		
25	HRCT		

MILD case	MODERATE case	SEVERE case
1-11	1-19	1-24

	Equipment for Diagnosis:						
S.	Description	Availabl functio e nal	_	Non- F	rem		
S. No			Reparabl e	Non- Reparable	ark		
1	Glucometer						
2	CBC machine						
3	Biochemistry analyzer						
4	Inflammatory markers*						
5	RTPCR lab						
6	X ray machine						
7	ECG machine						
8	Echo Machine						
9	Ultra Sound						
10	HRCT						

## THANKS..!!