

**GOVERNMENT OF ASSAM**

ASSAM STATE DISASTER MANAGEMENT AUTHORITY  
Ancillary Block, Janata Bhawan, Dispur, Guwahati-781006  
Phone: 0361-2237221 (O); E-mail: asdmaghy@gmail.com

**ORDER**

No. ASDMA/40/2021/20

Dated 7<sup>th</sup> June, 2021

Considering surge in COVID 19 cases and related demand of hospital resources, safety of hospital facilities needs to be assessed. In the context of fire and oxygen leakage in some COVID Hospitals in different states, it is critical that COVID Hospitals do not overlook the safety aspects with respect to natural as well as anthropogenic hazards. A Rapid Safety Audit (RSA) appears necessary in all the COVID Hospitals (Government and Private) in the State to ascertain gaps, if any, so that the respective institutions can further take necessary steps to better hospital safety and meet safety standards.

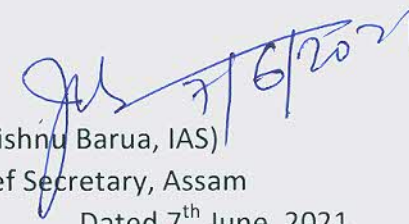
Therefore, in exercise of the powers conferred under section 20 read with sections 24 and 65 of the Disaster Management Act, 2005, the undersigned, in the capacity as the Chairman, State Executive Committee of the State Disaster Management Authority, Assam, hereby issue the following order with immediate effect:

1. A Rapid Safety Audit (RSA) of COVID Hospitals (Private and Government, including Co-operative and ESI COVID Hospitals) across Assam shall be conducted to identify gaps, if any, in hospital safety. The respective institutions, shall thereafter, take necessary steps to bridge the gaps for better hospital safety and meet other safety standards.
2. The RSA shall be conducted based on the formats developed for this purpose [User's Manual, Rapid Safety Audit Formats (part I and part II)] appended to this order.
3. Audit Teams shall be constituted by the respective District Disaster Management Authorities (DDMAs) in the following manner so as to complete the RSA of all COVID Hospitals in the district in a week's time:
  - I. Representative from District Disaster Management Authority (Team Leader)
  - II. Representative from PWD (Building)
  - III. Representative from Fire and Emergency Services
  - IV. Representative from Health Department
  - V. A competent official of the Power Department in the District
  - VI. Representative of the concerned hospital (preferably Maintenance Officer)
4. The checklist has broadly two sections:
  - a) Basic information related to the hospital (truthful and 'as is') which can be filled by the staff of the hospital prior to the audit
  - b) Safety Information which have to be filled by the audit team themselves after physical verification
5. Audit Teams shall submit duly filled check lists to the Chairperson, DDMA within 7 days of audit, highlighting the immediate steps and suggested medium/long term steps to be undertaken to



prevent a hazardous situation within the COVID hospital, with a copy to the respective DMO (Health).

6. Based on the findings of the RSA and associated inputs, the Department of Health and Family Welfare in the case of Government COVID Hospitals of the State, ESI in the case of ESI Hospitals and the respective managements in the case of Co-operative and Private Hospitals shall take steps (immediate, medium term and long term) to bridge the gaps so that hospital safety is improved to meet safety standards within a reasonable time limit.
7. RSA exercise is exempted from lockdown restrictions. COVID19 Protocol should be strictly followed during the audit exercise. Patient care shall not be hindered during the audit process.
8. ASDMA may arrange online discussion session on RSA with Audit Team in coordination with DDMAAs
9. The above RSA pertains to COVID Hospital settings. In the case of adhoc COVID Second Line Treatment Centers (CSLTCs) and some COVID First Line Treatment Centers (CFLTCs), especially where Oxygen beds are being arranged, the DDMAAs shall locally assess the adhoc arrangements and ensure patient safety in such centers. Taking basic fire & electrical safety precautions and ensuring adequate ventilation and air exchanges are of primary importance, inter alia.

  
(Jishnu Barua, IAS)  
Chief Secretary, Assam  
Dated 7<sup>th</sup> June, 2021

Memo No. ASDMA/40/2021/20-A

Copy forwarded to:

1. All Additional Chief Secretaries to the Govt. of Assam, Dispur, Guwahati-6
2. The Director General of Police, Assam
3. All Principal Secretaries/Commissioner & Secretaries to the Govt. of Assam, Dispur, Guwahati-6
4. Commissioner of Police, Guwahati-6
5. The Principal Secretaries of BTC, NCHAC, KAAC.
6. All Deputy Commissioners
7. The Director, Directorate of Information and Public Relations, Assam
8. All Superintendent of Police
9. S.O to the Chief Secretary, Assam, Guwahati-6
10. PPS to Hon'ble Chief Minister, Assam
11. All P.S to Hon'ble Minister, Assam, Dispur, Guwahati-6
12. All P.S to Advisor to Hon'ble Chief Minister, Assam

  
(Gyanendra Tripathi, IAS)  
Chief Executive Officer, ASDMA

**User's Manual**  
of  
Checklist for  
**Rapid Safety Audit (RSA) of Covid-19 Specific Facilities In Hospitals**

**A. Aim:**

The checklist aims to assess the safety of COVID-19-specific facilities in COVID-19 hospitals across the State.

**B. Objectives:**

1. To take stock of the present safety status in the COVID-19 specific facilities of COVID-19 hospitals.
2. To identify gaps in the existing infrastructure and thereby facilitate decision making for augmenting the safety in hospitals.

**C. Scope and limitations:**

1. Checklist is intended to assess buildings and utilities involved in COVID-19 care only and not the entire hospital complex.
2. Checklist lays its focus on assessing the safety from the perspective of following hazards only:
  - I. Fire
  - II. Oxygen leakage and associated eventualities
  - III. Electrical malfunctioning and associated eventualities
  - IV. Floods
  - V. Earthquakes
  - VI. Landslides

**D. Description of checklist:**

The checklist consists of two parts:

Part I: General information of hospital

Part II: Safety Status of hospital

Part I consists of 40 questions about the location, contact details, emergency response team, staff details, COVID-19 specific facilities and their capacities etc. whereas Part II consists of 68 questions under the following sections:

- a. Fire safety
- b. Multi-hazard preparedness
- c. Utilities- Electricity, Water supply, Oxygen supply,
- d. Communication facilities



E. **Instructions to use the checklist:**

1. The purpose of this safety audit needs to be clearly communicated to the hospitals as well as to the audit team. The audit is being carried out in the context of multiple incidents of fire and oxygen leakage and subsequent loss of lives reported from COVID hospitals in across India. The checklist intends not to criticize or find faults but to recognize areas of improvement so as to strengthen the state's efforts in improving hospital safety and containment of COVID-19 by preparing for any eventuality.
2. Part I of the checklist may be filled by a representative of the hospital prior to the physical audit. This form may be administered via google forms prior to the Part II audit because the data from Part I are beneficial for the easy conduct of Part II audit.
3. Part II of the checklist is to be filled by a team of external auditors, comprising of the following officials:
  - I. Representative from District Disaster Management Authority (Team Leader)
  - II. Representative from PWD (Building)
  - III. Representative from Fire and Emergency Services
  - IV. Representative from Health Department
  - V. A competent official of the Power Department in the District
  - VI. Representative of the concerned hospital (preferably Maintenance Officer)

The form is to be filled after a rapid yet careful inspection at the hospital. As deemed necessary, data may be collected through

  - Interviews with medical, para-medical and non-medical staff,
  - Checking of hospital records, and
  - On-site inspection of various facilities
4. All the questions in the checklist are objective. Wherever applicable, tick mark ( ✓ ) is to be used for answers. Space has also been provided for adding remarks, if any.
5. It is mandatory for the auditing team to take COVID appropriate precautions during the inspection and follow COVID-19 protocols of the hospital without fail. The hospital management is expected to facilitate the smooth conduct of the audit. The audit exercise shall not hinder patient care at any time.



**RAPID SAFETY AUDIT OF COVID-19 SPECIFIC FACILITIES IN HOSPITALS**

<b>PART I GENERAL INFORMATION OF THE HOSPITAL CHECKLIST</b>					
(to be filled by the concerned hospital staff)					
<b>Name of the respondent:</b>			<b>Contact No.:</b>		
<b>Designation of the respondent:</b>					
1	Name of the hospital				
2	Address with PINCODE				
3	District				
4	Name of the Revenue Circle		Municipal Corporation	Municipality	Gram Panchayat
5	Phone number (Landline):		Phone number (Mobile):		
6	E-mail id		Website		
7	Month and year of establishment of the hospital				
8	Ownership of the hospital		Government	Cooperative/	Private
9	Type of healthcare		Primary	Secondary	Tertiary
10	Total no. of beds				
11	a. Name and designation of the Head of the hospital (CEO/ Director/ Superintendent etc.)				
	b. E-mail id		c. Office number	d. Mobile number	
12	a. Name and designation of the Head of the Institutional Emergency Response Team (ERT)				
	b. E-mail id		c. Office number	d. Mobile number	
13	Details of the Core Committee Members of the Institutional Emergency Response Team (ERT)				
	Name		Role		Mobile Number
14	Has the hospital building faced any disasters in the past? (e.g.: flood, landslide, fire, etc.)		Yes	No	If yes, type of disaster:
					Month and year of occurrence:

15	a. Total no. of staff		b. No. of medical staff		c. No. of para-medical staff		d. No. of non-medical staff	
16	Total no. of operating staff shift-wise			General shift	1 <sup>st</sup> shift	2 <sup>nd</sup> shift	3 <sup>rd</sup> shift	
17	No. of doctors shift-wise			General shift	1 <sup>st</sup> shift	2 <sup>nd</sup> shift	3 <sup>rd</sup> shift	
18	No. of nurses shift-wise			General shift	1 <sup>st</sup> shift	2 <sup>nd</sup> shift	3 <sup>rd</sup> shift	
19	Age of the COVID block (in years)							
20	Year of renovation, if done.							
21	Total height of the building (in meters)			Above ground		Including		
22	Total No. of floors (e.g.: Basement + Ground)							
23	No. of basements			24. Use of basements (e.g.: parking, labs, laundry etc.)				
25	Total no. of COVID beds			26. Total no. of ICU beds				
27	Current occupancy of COVID beds			28. Average no. of COVID patients admitted per day				
29	a. Total no. of COVID wards			b. No. of COVID wards with oxygen		c. No. of COVID wards without oxygen		
30	a. Total no. of COVID isolation rooms			b. No. of isolation rooms with oxygen		c. No. of isolation rooms without oxygen		
31	a. No. of ventilators available			b. No. of BiPAP machines /Non Invasive Ventilation (NIV) available		c. No. of High Frequency Oscillatory (HFO) Ventilators available		
32	Are the following specialties available for COVID care?							
	General Medicine		Emergency Medicine		Anesthesia		Critical Care	
	Pediatrics		Nephrology		Cardiology		General Surgery	
33	No. of Operation Theatres			Is there a Central Sterile Supply Department (CSSD)?			Yes	No
34	Does the hospital have laboratories?			Yes		No		
35	Does the hospital have diagnostic radiology?			Yes		No		
36	Does the hospital have a pharmacy?			Yes		No		
37	Does the hospital have a kitchen and canteen?			Yes		No		
38	a. Total no. of staircases							
	b. No. of internal staircases			Width (in m):				
	c. No. of external staircases			Width (in m):				
	d. No. of fire escape staircases			Width (in m):				

39	No. of ramps		Width (in m):		
40	a. Total no. of lifts		Total capacity:		
	b. Patient lift/ bed lift		Capacity:		
	c. Service lifts		Capacity:		
	d. Fire lifts		Is lift license available?	Yes	No



RAPID SAFETY AUDIT OF COVID-19 SPECIFIC FACILITIES IN HOSPITALS PART II : SAFETY STATUS CHECKLIST			
Hospital Name and District:			
Distance to nearby fire station:		Distance to nearby hospital:	
FIRE SAFETY			
1	Does the hospital have a dedicated department for managing fire and safety?	Yes	No
Remarks:			
2	Is an Environment, Health & Safety (EHS) officer available at the hospital?	Yes	No
Remarks: Name & Contact details:			
3	Is Fire Emergency Plan available and communicated?	Yes	No
Remarks:			
4	Has the Emergency Response Team (ERT) been formed?	Yes	No
Remarks:			
5	Have the ERT been regularly trained?	Yes	No
Remarks: Check training records			
6	Is the nodal officer for handling emergencies available 24 hours?	Yes	No
Remarks: Designations in each shift:			
7	Is Fire sprinkler system available in all areas and is inspected (internally/externally) periodically?	Yes	No
Remarks: Date of last inspection:			
8	Are manual call points (MCP) available in all floors and operational?	Yes	No
Remarks:			
9	Are adequate number and types of fire extinguishers available in all floors?	Yes	No
Remarks:			
10	Is adequate firefighting system available- hydrant valves, hoses, monitors, etc.?	Yes	No
Remarks:			



11	Are periodical fire trainings (fire drills) and mock drills conducted?	Yes	No
	Remarks: Last date of mock drill:		
12	Is fire NOC available?	Yes	No
	Remarks: Date of expiry:		
13	Is adequate pressure maintained in fire hydrant and sprinkler pipelines (min of 5 Bar)?	Yes	No
	Remarks:		
14	Is adequate water level maintained in fire water reservoir? Mention level	Yes	No
	Remarks: Level:		
15	Are inspections tag/stickers available for fire extinguishers (mention frequency of inspection)?	Yes	No
	Remarks:		
16	Is adequate training given on usage of fire extinguishers to all staffs?	Yes	No
	Remarks: Check training records		
17	Availability of Automatic fire detection system (smoke detectors) and alarm system (MCP's, Annunciator panel, siren), and is in working condition?	Yes	No
	Remarks:		
18	Is accessibility of all firefighting equipment (fire extinguisher, hydrant valves, hose reels, etc.) ensured?	Yes	No
	Remarks:		
19	Are all combustibile materials segregated and stored away from ignition sources?	Yes	No
	Remarks:		
20	Does the basement have automatic sprinkler systems?	Yes	No
	Remarks:		
21	Are the basements free from combustibile materials (check for any unauthorized storages, position of DG, etc.)?	Yes	No
	Remarks:		

22	Are the Emergency Exits and Evacuation route accessible?	Yes	No
	Remarks:		
23	Are access roads available throughout the hospital building to facilitate the fire tender?	Yes	No
	Remarks: Width of road:		
24	Is the width of the main entrance gate not less than 4.5m? (min 4.5m)	Yes	No
	Remarks: Mention width:		
25	Are emergency evacuation route plans displayed prominently?	Yes	No
	Remarks:		
26	Is every exit and access to every exit free from all obstructions?	Yes	No
	Remarks:		
27	Are the emergency exit signs clearly visible (preferably illuminated) in each floors?	Yes	No
	Remarks:		
28	Does the staircase have a width of at least 2m?	Yes	No
	Remarks:		
29	Is width of the corridor and passage greater than or equal to 2.4m?	Yes	No
	Remarks:		
<b>MULTI-HAZARD PREPARDNESS</b>			
30	Is the building located in Flood Prone area?	Yes	No
	Remarks:		
31	Is High Flood Level (HFL) marked and visible?	Yes	No
	Remarks:		
32	Is the building located in a Hilly Terrain?	Yes	No
	Remarks:		

33	Do you have designated Assembly points marked?				Yes	No
	Remarks:					
34	Are Critical facilities (OT, ICU, etc.), chemical storage and Essential Supplies being stored on an elevated platform or above the HFL and secured against falling during earthquake?				Yes	No
	Remarks:					
35	Is procedure for movement of patients from critical facilities, in case of an earthquake, landslide, oxygen leak/shortage) available ?				Yes	No
	Remarks:					
<b>UTILITIES- ELECTRICITY ( * Power Department to append their remarks to this format as a separate sheet)</b>						
36	Is Diesel Generator (DG) facility available?				Yes	No
	Remarks: No of DGs present:					
37	Capacity of each generator:	1	2	3	4	
	Remarks:					
38	Is local diesel storage tank (for Diesel Generator) properly protected, and appropriate fire extinguisher provided?				Yes	No
	Remarks:					
39	Are all generators kept above HFL (High Flood Level)?				Yes	No
	Remarks:					
40	Does the fuel storage facility for generators ensure a back-up for 3 days?				Yes	No
	Remarks: Capacity of the storage tank:					
41	Do the ICUs and OTs have inverter back-up?				Yes	No
	Remarks:					
42	Are statutory electrical inspection certificates available (Earthing certificates, power quality etc.)?				Yes	No
	Remarks:					
43	Ensure all electrical equipment are capable for continuous duty (Continuous duty, Short time duty and Intermittent duty)?				Yes	No
	Remarks:					

44	Has an energy audit been conducted?	Yes	No
	Remarks:		
<b>UTILITIES - WATER</b>			
45	Source of water supply.	Internal:	External:
	Remarks:		
46	Is alternate water supply available?	Yes	No
	Remarks: Source:		
47	Water reserves for hospital services and functions (minimum 3 days)	Yes	No
	Remarks: If not, how many days?		
48	Is safe and potable water available in times of emergency?	Yes	No
	Remarks : Source:		
<b>UTILITIES- OXYGEN</b>			
49	Is the location of storage area for medical gases adequately ventilated?	Yes	No
	Remarks:		
50	Type of oxygen storage and its capacity	Bulk storage:	Bottled oxygen:
	Remarks:		
51	Are trolleys available for movement of oxygen cylinders?	Yes	No
	Remarks:		
52	Are caps available for oxygen cylinders in storage areas?	Yes	No
	Remarks:		
53	Is the staff adequately trained in handling of oxygen cylinders?	Yes	No
	Remarks:		
54	Are all oxygen cylinders stored upright?	Yes	No
	Remarks:		

JWW

55	For how many hours will the oxygen reserve last?	24 hours	48 hours	72 hours	72 and more
	Remarks:				
56	Does the oxygen plant have a competent operator who can handle emergencies such as leakage?		Yes	No	
	Remarks:				
57	Is automatic gas monitoring system available?		Yes	No	
	Remarks:				
58	Any open ignition sources (e.g.: kitchen) and inflammable material storage (e.g. diesel for DG) nearby the oxygen storage area?		Yes	No	
	Remarks:				
59	Are identification valves for different gases available and colour coding of pipelines been followed and displayed?		Yes	No	
	Remarks:				
60	Has leakage audit been conducted for gas pipelines?		Yes	No	
	Remarks:				
61	Has newly laid oxygen pipelines undergone inspection?		Yes	No	
	Remarks: Certificate:				
62	Is a bio-medical engineer available at the hospital?		Yes	No	
	Remarks:				
<b>COMMUNICATION SYSTEMS</b>					
63	Is a Public Addressing System (PAS) available?		Yes	No	
	Remarks:				
64	Does the PAS have a power back-up?		Yes	No	
	Remarks:				



65	Are all employees aware of the in-house emergency contact number of the nodal officer?	Yes	No
	Remarks:		
66	Are all external emergency contact numbers displayed prominently?	Yes	No
	Remarks:		
67	Is an alternative mode of communication available in case of the failure of existing communication system?	Yes	No
	Remarks:		
68	Is there a Common Alert Mechanism for natural disasters (flood, landslide, earthquake, etc.) affecting the hospital?	Yes	No
	Remarks:		

<b>ABBREVIATIONS</b>	
HFL	High Flood Level
OT	Operation
ICU	Intensive Care Unit
ERT	Emergency Response Team
MCP	Manual
NOC	No Objection Certificate
DG	Diesel
PAS	Public Addressing System
EHS	Environment, Health & Safety
RSA	Rapid Safety Status
<b>Overall Remarks by the auditing team / Include any critical concerns to be addressed immediately (including that of Fire, Electrical Issues, etc.)</b>	



Any other recommendations (if any)

Auditing Team			
Name of Auditor	Department	Contact Number	Signature

Date of the Audit	
Audit Report Submitted on:	

