



## COVID-19 LABORATORY ASSESSMENT CHECKLIST

### Background:

In response to unfolding realities and the need to have contingency plans in place for community transmission of COVID 19, the Nigeria Centre for Disease Control is expanding the laboratory pillar to increase the number of laboratories that can test for COVID 19 and bring the testing closer to states.

### A. Laboratory General Information.

<i>Name of Laboratory</i>	
<i>Location</i>	
<i>Type of lab</i> <i>*Public, Tertiary, State, Private, NGO etc.</i>	
<i>Laboratory Manager/Contact Person</i>	
<i>Accreditation Status (Stars)</i>	
<i>State/ Geopolitical Zone</i>	
<i>Can this lab operate 24 hours ? if No, how many hours a day.</i>	

### B. Biosafety and bio security checks

1. How many Rooms are available for the test?
2. How many biosafety cabinet?
3. What class of biosafety cabinet?
4. Are the cabinets certified?
5. Is there separate inactivation, extraction, master mix and template addition spaces?
6. Is there Dead- air/ PCR work station or UV box for PCR?

### C. What types of PPEs are available for work?

7. Gloves-
8. Gowns/ aprons
9. Coats-
10. Face mask-
11. Face shield-
12. N-95 respirator-
13. Shoe- covers-
14. Lab shoe-

### D. Waste management plan

15. Is there Autoclave in the lab?



# Nigeria Centre for Disease Control

*Protecting the health of Nigerians*

16. Is incinerator in the vicinity of the lab?
17. If not where?.....



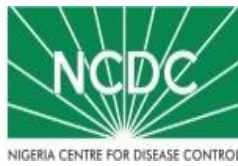


# Nigeria Centre for Disease Control

Protecting the health of Nigerians

## A. BASIC Equipment LIST FOR COVID19 TESTING:

S/N	EQUIPMENT	Make and Model	Qty.	PRESENT CONDITION	LAST MAINTENANCE /CALIBRATION	COMMENTS
1	Glove Box					
2	Biosafety Cabinet Class 1, 2, or 3					
3	Real-Time PCR machine: validated machines that are able to detect the probes used for the assays eg ABI- 7500, ABI- Quantstudio 5, MIC, CFX-96, Roche Lightcycler 480, Stratagene MX3000p, Rotorgene Q, etc.					
4	Computer for Data					
5	Dead- air/ PCR work station					
6	Automated Nucleic Acid Extractor					
7	Pipettes 2-10ul					
8	Pipettes 100ul					
9	Pipettes 200ul					
10	Pipettes 1000ul					
11	Pipettes tips					
12	Tubes and cryovials					
13	Fridge					
14	Freezer					
15	Vortex					
16	Thermo-Mixers/heating block					
17	Micro centrifuge (1.5-2 ml)					
18	Racks for 1.5 mL micro centrifuge tubes					
19	2 x 96-well -20°C cold blocks					
18	PPE					
19	Autoclave					
20	Incinerator					
21	Backup UPS					
22	Backup Generator					



# Nigeria Centre for Disease Control

Protecting the health of Nigerians

## B. Stock Management (Reagents & Consumables Available in Laboratory):

S/N	REAGENT	Make	QUANTITY AVAILABLE IN LAB	COMMENTS <b>**please list the manufacturers and suppliers of each of the listed kits</b>
	<b>Molecular</b>			
1	Nucleic Acid Extraction			
2	Enzymes			
3	COVID Assay Kit			
4	10% bleach			
5	Absolute Ethanol			
6	BSA			
7	Tris (10 Mm)			

### Summary of Basic equipment requirement for a lab to commence covid19 testing

- Real time PCR machines- Validated machines that are able to detect the probes used for the assays eg ABI- 7500, ABI- Quantstudio 5, MIC, CFX-96, Roche Lightcycler 480, Stratagene MX3000p, Rotorgene Q, etc.
- Centrifuge and microcentrifuges
- Vortex mixer and Thermomixer.
- Micro Plate shaker

### Biosafety requirement

- 1 Glovebox + 1 BSC class All or 2 certified Class All biosafety cabinets for inactivation and extraction of samples.
- 1 PCR work station or 1 dead air box for template addition and mastermix preparation
- At least 1 Autoclave
- An incinerator should be present within the facility or a waste disposal plan in place for the laboratory

### Quality assurance

- 4 separated workspaces Maintaining uni- direction flow for inactivation, extraction, mastermix template addition and amplification workflows.
- 4 sets of dedicated pipettes for each workflow with filtered tips.
- PCR workstation for mastermix preparation

### Power

- Dedicated Inverter or 5 KVa UPS back for the Real time PCR machine, computer, Biosafety cabinets and centrifuge.

### Laboratory Supply chain management

- The laboratory should be able to demonstrate that it has access to unlimited supply of laboratory reagents, consumables and PPE for uninterrupted testing

**Please indicate which of these equipment you have in your facility when completing the checklist above.**