

**Handling of Clinical Biochemistry,
Hematology, coagulation, urine and other
body fluids COVID 19 suspected/ positive
cases**

Dept. of Pathology
KGMU, Lucknow



IMPORTANT

All samples collected for laboratory investigations should be regarded as potentially infectious

Transfer of Pathology Specimen from suspicious/ confirmed COVID-19 to the pathology laboratories

- All pathology COVID-19 suspicious/confirmed specimens must be *labeled clearly*.
- Transport box must be sealed properly and clearly labeled as COVID-19 specimen.



Transfer of Pathology Specimen from suspicious/ confirmed COVID-19 to the pathology laboratories



- All pathology specimens must be further placed in a secondary container to minimize the potential for breakage or a spill.
 - Small containers are placed in larger secondary containers.
 - All these containers then shall be put in a large plastic box-with biohazard label (COVID-19).



- All samples must be received in BIOSAFETY CABINET (TYPE A2), sprayed all surface of transport box with 0.5% sodium hypochlorite solution and kept for 15 mins followed by disinfecting with 70% isopropyl alcohol (sprit) at receiving end and/or in biosafety cabinet kept waiting for 5-10 mins. After those samples can be taken in to Laboratory area for further processing.

Handling Biochemistry & hematology

specimens of COVID-19

- All manipulations of potentially infectious materials, including those that may cause splashes, droplets, or aerosols of infectious materials (e.g. loading and unloading of sealed centrifuge cups, blending, vigorous shaking, vortexing or mixing) however, should be performed by trained personnel with demonstrated capability.
- CENTRIFUGING biochemistry samples in closed properly sealed centrifuge machine, centrifuge for 15-20 mins keep waiting for complete stop of centrifuge machine after that wait for 1—15 min to minimize aerosol production then open the lid of centrifuge machine with proper care person working on centrifuge machine must be wearing PEP kits & HEMATOLOGICAL SPECIMEN SHALL NOT BE DONE



DO'S AND DON'T'S FOR WARD STAFF WHILE TRANSFERRING SAMPLES



Do not send blood/serum/ pathology samples rolled up in the forms



This is a secondary plastic container where all Corona +ve / suspected samples shall be sent To the Pathology laboratory.

PPE instruction for pathology lab

personnel

- Laboratory staff must wear personal protective equipment (PPE) when conducting work in the laboratory. PPE must be removed on leaving the laboratory and hygiene practices including hand washing must be rigorously maintained.
- PPE must include disposable gloves and a laboratory coat or gown as a minimum, and may also include eye protection and other equipment, as identified by risk assessment.



Work area and equipment

disinfection

- Irrespective of the containment level, work surfaces and equipment must be decontaminated after specimens have been processed.
- All metal surfaces must be wiped out to disinfect with 70% alcohol.
- Other surfaces bench top floors are disinfect with 0.5% sodium hypochlorite solution.
- Pay attention to all surfaces that may have come into contact with specimens or specimen containers.



- Use a disinfectant solution with proven activity against enveloped RNA viruses including sodium hypochlorite (bleach) (e.g. 1,000 ppm (0.5%) for general surface disinfection and 10,000 ppm (1%) for disinfection of blood spills)
- All equipments before and after use must be cleaned and disinfect with 0.5% sodium hypochlorite solution.
- Followed by wiped out with 70 % isopropyl alcohol (alocohol)
- Contact time -30 minutes

Waste management

- Infectious material to be disposed in a separate yellow bag labeled COVID-19.



References

- *CDC interim laboratory biosafety guidelines for handling and processing specimens associated with corona virus*
- *WHO- Laboratory biosafety guidance related to the novel coronavirus (2019-nCoV)*
- *Guidance COVID-19: safe handling and processing for samples in laboratories. Public health England*