

DEPARTMENT OF FORENSIC MEDICINE
FORENSIC TOXICOLOGY LABORATORY
NEIGRIHMS

PROTOCOL FOR
BLOOD ALCOHOL ESTIMATION (BAE)
USING HEADSPACE GAS CHROMATOGRAPHY WITH FLAME IONIZATION DETECTION
(HS-GC-FID)

1

SUBMISSION OF SAMPLE WITH REQUISITION FORM



SAMPLE REQUISITION FORM

Patient Details :
CR No. :
MLC No. :
Date & Time of Collection :
Name :
Signature & Seal :

- All samples sent to the Department of Forensic Medicine, NEIGRIHMS, shall be accompanied by a Sample Requisition Form in the format prepared by the Department.
- Samples sent without the Requisition Form shall be rejected and returned without testing.**
- The form must contain all necessary details, including:
- All Non-MLC samples are to be accompanied with a Payment Receipt as per Hospital norms.

Sample Details (to be included)

- Patient Details
- CR No.
- MLC No.
- Name
- Date and Time of Collection
- Signature and Seal of Medical Officer
- Any other information as indicated in the Form

2

CORRECT SAMPLE CONTAINER AND MODE OF SUBMISSION



Sodium Fluoride
Vacutainer
(Preferred)

Proper labelling of
samples, including
Name of Patient and
Date of Collection.

- Blood samples shall be collected, stored and sent to the Laboratory in **Sodium Fluoride vacutainers only**, with a minimum required volume of **2 mL** of blood. Samples stored in other vials (e.g. EDTA vials) will be **rejected and returned**.
- All samples should be **properly capped, sealed and labelled**.
- The sample vacutainer should be kept inside an envelope which is to be sealed properly. Information of the sample should be mentioned on the envelope along with the signature and seal of Medical Officer.
- All outside samples should be sent through the Medical Superintendent, NEIGRIHMS.
- Sample submission timings:** Monday – Friday: 9 AM – 3 PM
Saturday: 9 AM – 1 PM
- Payment for sample testing shall be as per Institute norms, depending on MLC or Non-MLC status.



Sodium Fluoride
Vacutainer
(ACCEPTED)



EDTA / Other Vials
(REJECTED)

3

VERIFICATION AND APPROVAL BY HOD/FACULTY IN-CHARGE OF FORENSIC MEDICINE, NEIGRIHMS



- All samples sent to the Department are verified and approved by the Head of Department (HOD) / Faculty In-Charge of Forensic Medicine, NEIGRIHMS, prior to analysis.

4

SAMPLE ACCEPTANCE AND REGISTRATION



Sample Accepted
& Registered

- Proper samples enclosed with the complete Sample Requisition Form shall be accepted at the Department.
- Each accepted sample will be assigned a unique Sample ID as per Laboratory protocol.

5

PROCESSING AND ANALYSIS



- After sample registration, the sample shall be processed and sent to the Toxicology Laboratory for analysis using the Headspace GC-FID (HS-GC-FID).
- An aliquot of the sample is taken for analysis.
- All samples are analysed with the Validated Method for HS-GC-FID as per the Laboratory's instruments.
- The report is expressed in **g% for ethanol** as per the validated method.

6

REPORT VERIFICATION AND DISPATCH



- All reports of analysis are verified and signed by the Head of Department (HOD) / Faculty In-Charge of Forensic Medicine, NEIGRIHMS.
- The signed reports are then dispatched to the Requisitioning Authority.

