

The Collection of Blood Samples for Alcohol Intoxication Evaluation

1. The collection of the blood for the determination of alcohol level takes place in the institutes of forensic medicine, being performed in all the persons brought in by the Police forces or other institutions with such abilities (The Ministry of Transportations, Security Services, and The Ministry of Defence).

Whenever possible, blood samples will be taken from the victim, also.

When a person is suspected to be under the influence of psychotropic substances, the collection of about 100 mL of urine is compulsory.

2. For the determination of alcohol blood levels, the samples will be collected in single use syringes: two samples, 10 mL each, separated by one hour interval, with the annotation of the time on each sample. It is recommended that the first sample to be collected within 30 minutes from the accident or incident.

The skin will be disinfected using sublimate or other antiseptic substances, without alcohol, ether, benzene, or any volatile substances.

In the case of the refusal of the collection of the second blood sample, the person should be informed that this leads to the impossibility of retroactive calculation of the ethanol level, from the time of the accident.

In particular situations, when the second collection is impossible, this fact will be clearly written in the clinical examination form, also pointing out the reason. In these conditions, 10 mL of urine will be collected under careful surveillance, in a clean recipient, also carefully sealed.

3. The surveillance or guarding of the person in the time interval between the two collections will be carried out the police workers who brought the person in.

4. The blood will be placed in a clean container, of approx 10 mL, which can be sealed; it is recommended that an anticoagulant substance to be used (50 mg of sodium fluoride or of neutral sodium citrate). When it is suspected the use of psychotropic drugs, the urine (approx 100 mL) will be collected in a well rinsed container.

5. The doctor also performs a medical examination when the first blood sample is collected and the data is to be written down in the examination form, in two copies. When not so, the reason is to be emphasised.

The original of the clinical examination form will go along with the blood samples and will be kept in the forensic medicine laboratory, where the analysis is performed.

6. The vials containing the blood samples will be immediately sealed by the person who collected them, writing on the label, in capitals, the name and surname of the

person whose blood was collected, the date and time of the collection and, also the stamp and signature of the doctor who observed the procedure.

7. Sealing the vials will be done using only rigid (red) wax, bearing the seal of the forensic specialist or of the institution, observed by the person involved assisted by two witnesses. Every hospital which has the abilities for such analysis has to be given the official seals.

8. The samples will be transported by the police workers in the shortest time to the above mentioned institutions. In the case that this is not possible, the samples should be kept in the refrigerator.

9. Sending the vials with the specimens to the laboratory will be made respecting a standard procedure, by the Police department which is requesting the analysis. It will be accompanied by the original versions of the clinical examination forms, as well as by the form completed when the biological specimens were collected; the copies are withheld by those who are requesting the analysis.

10. The tests will be made only in the *forensic toxicology laboratories* within the territorial forensic medicine services. The alcohol levels determined in other clinical laboratories have no legal, nor civil or administrative value.

11. The lab results will be written in a toxicology report form, referring to the alcohol blood levels in each of the two samples, and using only the officially accepted method. The report will be signed by the specialist who performed the analysis and supervised by the lab chief.

12. Using other lab methods for determining the alcohol blood levels leads to the cancellation of the legal value of the analysis, as well as of any other eventual reconsideration possibilities.

The analysis form will be sent as soon as possible to the Police department which has requested the test.

The laboratory should have a special registration form for all the blood alcohol tests, with all the data. Also, all the documents regarding one case should be kept, in order to form a scientific data base, necessary in the cases when the justice claims supplementary data (the address of the Police department, the original forms of the clinical examination reports, a copy of the analysis report, any possible correspondence regarding the case).

13. The remaining blood (the bottle with traces of blood) will be kept for 15 days for eventual serology tests, afterwards being destroyed.

PRINCIPLES FOR THE RETROACTIVE CALCULATION OF ALCOHOL BLOOD LEVELS

1. The retroactive calculation of alcohol blood levels gives approximate theoretical values, thus it cannot offer any certain value in the justice, because of the great

variability of several individual biological constants, which cannot be quantified, and also because of the subjective declarations regarding alcohol drinking.

2. The retroactive calculation of alcohol blood levels is to be performed only in the forensic Medicine Institutes, by a group consisting in a senior forensic medicine specialist and a senior pharmacist or toxicologist, from the forensic toxicology laboratory of the above named institute, both being experts in this field.

3. The alcohol level re-calculation procedure has to be performed only in the cases when two distinct blood samples were collected, separated by one hour interval, and exceptionally in persons found a severe clinical state (coma, traumatic shock, haemorrhagic shock, emergency surgery), which did not allow a second blood sampling. The retroactive calculation cannot be done using the persons own alcohol drinking declarations.

4. The expertise will be performed only when requested by the law enforcement:

- At most twice, when requested by the Police forces;
- The third time only when requested by the district attorney;
- Any time when requested by a Court of Law.

5. Each expertise will be paid separately, regardless the number of events.

6. The retroactive calculation will be performed according to the methodology approved by the Superior Council for Forensic Medicine, and being held as a secret, hence not made public in any circumstance (therefore, not even in the public Court sessions).

7. These expertises can be subdued only to the Superior Commission for Forensic Medicine, which either approves the act, or dictates a new expertise in the laboratories of the Forensic Medicine Institute "Mina Minovici" from Bucharest, in the case when the first expertise had taken place in another Forensic Medicine Institute in the country.

8. The retroactive calculation for the alcohol blood levels is based on the results of the lab tests, which are going to be correlated with the declarations of the person involved and those of the witnesses, declarations offered to the experts by the requesting legal institutions.

9. An expertise for the retroactive calculation of the alcohol blood level should be performed for only one type of alcohol drinking.

10. The address, order or request coming from the legal institutions will contain: the identification data for the person involved, the age, the profession, the type of crime, the time of the crime (date, hour, minute), the amount of ingested alcohol, the type of the beverage ingested, the period of time when the beverage was ingested, the content of the stomach at the moment of drinking, the body weight, the lab results for the two blood tests, and the moment of their collection; also it is recommended to specify the moment in time for which the retroactive calculation of the blood alcohol levels is requested; any other useful data.

11. The above-mentioned address has to be accompanied by a copy of the clinical examination form, a copy of the form completed when the blood samples were collected, a copy of the blood alcohol level bulletin, and, when considered necessary, or when requested by the Forensic Medicine Commission, the whole file of the case.