



Medical Notes

## Hidden Clues in the ER Report

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### Blood Alcohol Test



You may see the notation **ETOH** on the ER flow sheet or in the ER report. This indicates that an **alcohol test** has been performed. The amount of alcohol in one's system can

be measured by taking a sample of blood for analysis by a laboratory. The laboratory test can be referred to in a number of ways: as blood alcohol, ethanol, ethyl alcohol, or as ETOH. The amount of alcohol present in the bloodstream is measured in milligrams of alcohol per deciliter of blood, and is identified as "mg / dL." (A deciliter is one tenth of a liter, or 100 milliliters, a little less than one half of a cup). The legal driving limit in most states is 100mg / dL, noted as "0.1 percent;" some states have lowered the limit to 0.08 percent.

The following blood alcohol levels will produce the symptoms noted:

- 50mg / dL (0.05%) – sedation or tranquility
- 50 – 150mg / dL (0.05% – 0.15%) – a lack of coordination
- 150 – 200mg / dL (0.15% – 0.2%) – intoxication
- 300 – 400mg / dL (0.3% – 0.4%) – unconsciousness
- Greater than 400mg / dL (0.4%) – may be fatal

### Narcan

If you see the notation **ih** on the ER flow sheet, look in the medication administration records to see if **Narcan** has been administered. The notation **ih** is medical shorthand for a reversible reaction. If the ER doctor suspects that the patient is under the influence of narcotics, he or she may order Narcan to

be administered by injection or IV. If the patient is under the influence of narcotics, Narcan will reverse the effects, hence the reversible notation. Examples of narcotics whose effects can be reversed by Narcan are:

Codeine, heroin, hydrocodone, methadone, morphine, oxycodone and narcotic cough medicines.

### CPK Tests – Heart Attack or Air Bag Injury

Certain blood tests are read as "abnormal" after **damage has occurred to the heart**. When cells in the heart muscle die, the chemicals in the cells are released into the blood over a period of several hours. One of these chemicals (or markers) that is commonly used along with EKGs and other tests to diagnose a heart attack is Creatine Phosphokinase or **CPK**.

The normal range for CPK in the blood is from 35 to 190 units per liter. When a heart attack occurs, the CPK level begins to rise after about four to eight hours and typically remains elevated for two to three days. If the physician suspects that a patient in an automobile accident may have experienced a heart attack immediately before or after the accident, he or she may order a series of CPK tests spaced several hours apart to see if the duration of elevated CPK is indicative of heart attack.



Why else would a CPK test be ordered for a patient involved in an automobile accident? In the case of air bag deployment, there is potential for damage to the heart muscle and surrounding tissues due to the air bag impact. The physician will often order a CPK test to rule out heart damage due to air bag deployment. In the case of air bag injury, the CPK will rise quickly and fall off more quickly than in the case of heart attack. There have been many cases when patients have been discharged after relatively minor accidents, only to develop problems several hours later due to air bag induced damage to the heart. ❖