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| **Carboxyhaemoglobin** | | | |
| **Synonyms** | |  | COHb |
| **Clinical Indication** | |  | Investigation of possible carbon monoxide poisoning. |
| **Part of Profile / See Also** | |  |  |
| **Request Form** | |  | Combined Pathology manual blood form or ICE request |
| **Availability / Frequency of Analysis** | |  | On request |
| **Turnaround Time** | |  |  |
| **Patient Preparation** | |  | Ideally, blood should be collected as soon as possible after exposure; in an emergency situation if a patient has received oxygen before arrival the carboxyhaemoglobin levels may be misleadingly low.  In patients being investigated for domestic poisoning samples must be collected as soon as possible after exposure to the combustion products; if there is a delay in leaving the house and having the test done results may be misleadingly low. |
| **Sample Requirements** | |  |  |
|  | **Specimen Type** |  | Whole blood |
|  | **Volume** |  | 1 ml |
|  | **Container** |  | Lithium Heparin tube  Paediatric Green top (Lithium Heparin) tube  Or  Paediatric Orange top (Lithium Heparin) tube  **Samples should be collected as soon as possible after exposure** |
| **Reference Range & Units** | |  | Carbon monoxide is produced continuously in the body as a by-product of haem breakdown. This leads to a normal baseline COHb concentration of about 0.5%. In pregnancy and especially in haemolytic anaemias this can rise towards 5%. Cigarette smoking leads to COHb concentrations of up to about 13% in heavy smokers  Elimination Half-Life: On air: 250 minutes  On 100 % oxygen: 50 minutes  On Hyperbaric oxygen: 22 minutes |
| **Interferences** | |  |  |
| **Interpretation & Clinical**  **Decision Value (if applicable)** | |  |  |
| **References** | |  | Letter from the Chief Medical Officer and Chief Nursing Officer dated 7th September 1998 (PL/CMO/98/5, PL/CNO/98/8) |
| **Test code** | |  | COHB |
| **Lab Handling** | |  | Store whole blood at 4°C prior to analysis on blood gas analyser.  Analyse as soon as possible |

