



Hôpital général St-Boniface General Hospital

## Date Rape Drugs **BIOCHEMISTRY BYLINE**

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A date rape drug is a sedative which is administered by an acquaintance to an unsuspecting female to obtain non consensual sex. The drug is most often mixed with an alcoholic beverage, which when consumed causes antegrade amnesia with some degree of drowsiness through to unconsciousness. Alcohol works synergistically with these drugs to enhance the sedative effect.

The two date rape drugs which have received media attention over the last year are gamma-hydroxybutyrate and the benzodiazepine flunitrazepam. Neither drug is marketed in Canada or the United States. Other benzodiazepines such as triazolam, diazepam, lorazepam and alprazolam can provoke amnesia and have been used in the past for the same purpose. All of these drugs are short acting, and are quickly eliminated renally from the body.

Drug	Typical Dose (mg)	Duration of Effect (hours)	Post Dose Detection Interval (hours)
flunitrazepam	2	6 – 12	6 – 18
gamma-hydroxybutyrate	2000	0.5 – 3	1 – 8

Based on published urine excretion information and the detection limits of our screening procedures, it is estimated that an average 2 mg dose of flunitrazepam would be detected between 6 and 18 hours following its ingestion. An average 2 g dose of gamma-hydroxy butyrate would be detected between 1 and 8 hours post dose. No dosing experiments have been conducted at this laboratory to confirm the anticipated detection times.

In order to detect both of these agents in the same specimen, urine must be obtained within 6 hours of the victim regaining consciousness. When submitting the urine specimen to the Biochemistry Laboratory, clearly indicate that this is an investigation for date rape drugs. Specific procedures are used by the laboratory to detect these drugs. A general drug screen does not detect their presence in urine.