

Bile is generally aspirated from the gallbladder using a hypodermic syringe. It may be necessary to tie off the gallbladder prior to collection if contamination appears to be an issue. Bile should be collected prior to the liver specimen to avoid contamination. Many drugs of forensic interest accumulate in the bile, particularly those that are heavily conjugated, such as opiates, benzodiazepines and cannabinoids. Bile may also be used in cases where chronic heavy-metal poisoning is implicated. However, owing to the presence of bile salts and fats, drug extraction from this matrix can be complicated and extensive extraction and cleanup procedures are often required.