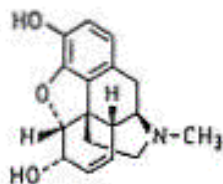


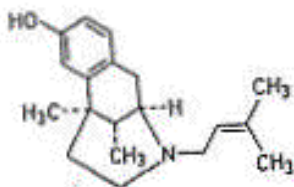
Chemical Classes of Opioids

PHENANTHRENES



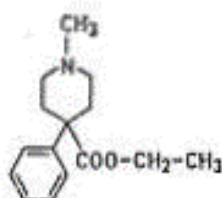
MORPHINE

BENZOMORPHANS



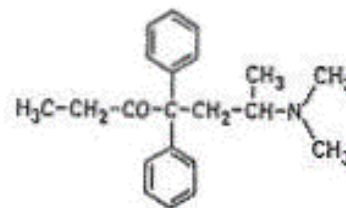
PENTAZOCINE

PHENYLPIPERIDINES



MEPERIDINE

DIPHENYLHEPTANES



METHADONE

Rx EXAMPLES > morphine
 codeine
 hydrocodone*
 hydromorphone*
 levorphanol*
 oxycodone*
 oxymorphone*
 buprenorphine*
 nalbuphine
 butorphanol*
 naloxone*
 heroin (diacetyl-morphine)

pentazocine
 diphenoxylate
 loperamide

meperidine
 fentanyl
 sufentanil
 alfentanil
 remifentanil

methadone
 propoxyphene

X-SENSATIVITY > PROBABLE

POSSIBLE

LOW RISK

LOW RISK

*These agents lack the 6-OH group of morphine, possibly decreasing cross-sensitivity within the phenanthrene group.

Courtesy of Dr. Jeffrey Fudin

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Reisine T, Pasternak G. Opioid analgesics and antagonists. In Hardman JG, Limbird LE, Molinoff PB, Ruddon RW, Gilman AG, eds. Goodman and Gilman's The Pharmacological Basis of Therapeutics. 9th ed. New York, NY: McGraw-Hill Companies; 1996:521-555.

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