The equianalgesic dose of methadone compared to other opioids is extremely variable with chronic dosing. Conversion from oral morphine to oral methadone may range from 4 to 14:1.

† Risk of CNS depression with repeated use; accumulation in elderly or persons with impaired renal function with regular dosing. Monitor for patient variability in duration of efficacy.

Source: PIER modules on Pain and Opioid Abuse. ©2007 by the American College of Physicians. The information included herein should never be used as a substitute for clinical judgment and does not represent an official position of ACP. Check the PIER Web site (http://pier.acponline.org) for the most current information available.

### WHO Pain Relief Ladder

**Step 1**
- Nonopioid
  - + / - adjuvant

**Step 2**
- Opioid for mild to moderate pain
  - + / - Nonopioid
  - + / - Adjuvant

**Step 3**
- Opioid for moderate to severe pain
  - + / - Nonopioid
  - + / - Adjuvant

If pain occurs, there should be prompt oral administration of drugs in the following order: nonopioids (aspirin and paracetamol); then, as necessary, mild opioids (codeine); then strong opioids such as morphine, until the patient is free of pain. To calm fears and anxiety, additional drugs — “adjuvants” — should be used. To maintain freedom from pain, drugs should be given “by the clock,” that is every 3-6 hours, rather than “on demand.” This three-step approach of administering the right drug in the right dose at the right time is inexpensive and 80%-90% effective. Surgical intervention on appropriate nerves may provide further pain relief if drugs are not wholly effective.

Side effects other than constipation usually subside during prolonged treatment but occasionally persist. Other adverse effects include addiction and complex problems in functioning or quality of life. There are no accepted or validated risk factors for these effects, but it is widely acknowledged that there is a link between previous drug or alcohol abuse and addiction to opioids prescribed for pain. Deterioration in functioning or quality of life appears to be closely associated with lack of motivation to improve; young adults are the most susceptible to this type of deterioration.

Reprinted with permission copyright © 2003 Massachusetts Medical Society.