IV, Intravenous; *SC,* subcutaneous.

From World Health Organization: *WHO guidelines on the pharmacological treatment of persisting pain in children with medical illnesses,* Geneva, 2012, World Health Organization.

TABLE 5-7

Starting Dosages for Opioid Analgesics in Opioid-Naive Infants (1 Month to 1 Year Old)

Medicine	Route of Administration	Starting Dosage
Morphine	Oral (immediate release)	80-200 mcg/kg every 4 h
	IV injection*	1 to 6 months old: 100 mcg/kg every 6 h
	SC injection	6 to 12 months old: 100 mcg/kg every 4 h (maximum: 2.5 mg/dose)
	IV infusion*	1 to 6 months old: Initial IV dose: 50 mcg/kg, then 10-30 mcg/kg/h 6 to 12 months old: Initial IV dose: 100-200 mcg/kg, then 20-30 mcg/kg/h
	SC infusion	1 to 3 months old: 10 mcg/kg/h 3 to 12 months old: 20 mcg/kg/h
Fentanyl[†]	IV injection	1-2 mcg/kg every 2-4 h[‡]
	IV infusion	Initial IV dose 1-2 mcg/kg[‡], then 0.5-1 mcg/kg/h
Oxycodone	Oral (immediate release)	50-125 mcg/kg every 4 h

[*]Administer intravenous (IV) morphine slowly over at least 5 minutes.

[†]The IV doses of fentanyl for infants are based on acute pain management and sedation dosing information.

[‡]Administer IV fentanyl slowly over 3 to 5 minutes.

IV, Intravenous; *SC,* subcutaneous.

From World Health Organization: WHO guidelines on the pharmacological treatment of persisting pain in children with medical illnesses, Geneva, 2012, World Health Organization.

Coanalgesic Drugs

Several drugs, known as **coanalgesic drugs** or **adjuvant analgesics**, may be used alone or with opioids to control pain symptoms and opioid side effects (Table 5-8). Drugs frequently used to relieve anxiety, cause sedation, and provide amnesia are diazepam (Valium) and midazolam (Versed); however, these drugs are not analgesics and should be used to enhance the effects of analgesics, not as a substitute for analgesics. Other adjuvants include tricyclic antidepressants (e.g., amitriptyline, imipramine) and antiepileptics