

# Nursing Dosage Chart Cheat Sheet

## Dosage conversion chart

### Milligrams (mg) and micrograms (mcg)

$$1 \text{ mg} = 1000 \text{ mcg}$$

$$1 \text{ mcg} = 0.001 \text{ mg}$$

### Grams (g) and milligrams (mg)

$$1 \text{ g} = 1000 \text{ mg}$$

$$1 \text{ mg} = 0.001 \text{ g}$$

### Milliliters (mL) and drops

$$1 \text{ mL} = 20 \text{ drops (approximate for medical use)}$$

$$1 \text{ drop} = 0.05 \text{ mL}$$

### Liquid volume: teaspoons, tablespoons, and milliliters

$$1 \text{ teaspoon (tsp)} = 5 \text{ mL}$$

$$1 \text{ tablespoon (tbsp)} = 15 \text{ mL}$$

$$1 \text{ oz} = 30 \text{ mL}$$

$$1 \text{ mL} = 0.0338 \text{ oz}$$

$$1 \text{ mL} \approx 20 \text{ drops (medical approximation)}$$

### Liters (L) and milliliters (mL)

$$1 \text{ L} = 1000 \text{ mL}$$

$$1 \text{ mL} = 0.001 \text{ L}$$

## IV drip rate formulas

### Drops per minute

$$\text{Drops/min} = (\text{Total Volume in mL} / \text{Time in hours}) \times \text{Drop Factor}$$

Drop Factor: commonly 10, 15, 20, or 60 drops/mL

### IV flow rate

$$\text{Flow Rate (mL/hr)} = \text{Total Volume in mL} / \text{Time in hours}$$

## Dosage based on drug concentration

$$\text{Dosage (mg)} = \text{Volume (mL)} \times \text{Concentration (mg/mL)}$$

## Infusion rate (for medications in infusion)

$$\text{Rate (mL/hr)} = (\text{Desired Dose} / \text{Drug Concentration}) \times 60$$

## Pediatric dosage calculations

### Based on weight:

- Dosage (mg/kg/day) = (Patient's weight in kg) x (Dosage per kg)
- Divide total daily dosage into appropriate frequency: Dosage (mg/kg/day) / Frequency of administration

## Body surface area (BSA) for dosage calculations

### Mosteller formula:

$$\text{BSA (m}^2\text{)} = \sqrt{[(\text{Height in cm} \times \text{Weight in kg}) / 3600]}$$

## Additional notes