

Lethal Dose Table

Lethal Dose (LD₅₀) is the amount of an ingested substance that kills 50 percent of a test sample. It is expressed as mg/kg or milligrams of substance per kilogram of body weight. You should assume that LD₅₀ is the same for rats and humans.

Common name	Toxin	Lethal doses	Description	Toxic Response
aspirin	Acetyl-salicylic acid C ₉ H ₈ O ₄	LD ₅₀ 200 mg/kg (rat, oral)	Odorless white crystal	Gastric distress, confusion, psychosis, stupor, ringing in the ears, drowsiness, hyperventilation
table salt	sodium chloride NaCl	LD ₅₀ 3000mg/kg (rat, oral) 12357 mg/kg (human, oral)	white cubic crystals	eye irritant, elevated blood pressure
bleach (fumes)	Chlorine Cl ₂	LD ₅₀ 850 mg/kg (rat, inhaled)	greenish colored gas, amber liquid, pungent odor	corrosive to eyes, skin, respiratory tract, nausea, vomiting, pulmonary edema
arsenic	arsenic, arsenic trioxide As, As ₄ O ₆	LD ₅₀ 15 mg/kg (rat, oral)	grey metallic crystals	acute- irritates eyes, skin, respiratory tract, nausea. chronic-convulsions, tissue lesions, hemorrhage, kidney impairment
sugar	glucose C ₆ H ₁₂ O ₆	LD ₅₀ 30,000mg/kg (rat, oral)	sweet white powder	depressed activity, gastrointestinal disturbance, If diabetic-heart disease, blindness, nerve damage, kidney damage.
lead	lead Pb	Lowest published dose 450 mg/kg (human, oral)	bluish, silvery solid	acute- headache, insomnia, joint pain Chronic- anemia, kidney disease, reproductive and developmental toxin
cola	caffeine C ₈ H ₁₀ N ₄ O ₂	LD ₅₀ 140mg/kg (dog, oral)	white odorless powder or crystals	acute renal failure, nausea, psychosis, hemorrhage, increased pulse, convulsions
alcohol	ethanol C ₂ H ₆ O	LD ₅₀ 7060 mg/kg (rat, oral)	colorless liquid, pleasant odor	nausea, headache, vomiting, dizziness, nervous system depression, confusion, loss of consciousness
vitamin A	retinol C ₂₀ H ₃₀ O	LD ₅₀ 2000mg/kg	yellow crystals, orange solid	convulsions, unconsciousness, reproductive toxin
Cadmium	Cd	LD ₅₀ 225 mg/kg (rat, oral)	Lustrous solid	Renal damage, lung damage, bone damage
Mercury Compounds	Hg	LD ₅₀ 25-200mg/kg (rat, oral)	Odorless, Silver liquid	Nervous system failure, visual disorders, deafness

