

Lethal Dose Table

Lethal dose (LD₅₀) is the amount of an ingested substance that kills 50 percent of a test sample. It is expressed in mg/kg, or milligrams of substance per kilogram of body weight.

Common name	Toxin	Lethal doses	Description	Toxic response
Aspirin	Acetyl- salicylic acid $C_9H_8O_4$	LD ₅₀ 200 mg/kg (rat, oral)	Odorless white crystal	Gastric distress, confusion, psychosis, stupor, ringing in ears, drowsiness, hyperventilation
Table salt	Sodium chloride NaCl	LD ₅₀ 3 g/kg (rat, oral) 12357 mg/kg (human, oral)	White cubic crystal	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
Helium	Helium He	Not established	Odorless colorless gas	Dizziness, nausea, simple asphyxiant
Lorchel mushroom	Gyromitrin $C_4H_8N_2O$	LD ₅₀ 200 mg/kg (rat, oral)		Nausea, vomiting, severe liver damage, coma, convulsions
Arsenic	Arsenic, arsenic trioxide As, As_4O_6	LD ₅₀ 15mg/kg (rat, oral)	Grey, metallic crystals	Acute- irritates the eyes, skin, respiratory tract, and nausea. Chronic convulsions, tissue lesions, hemorrhage, kidney impairment
Sugar	Glucose $C_6H_{12}O_6$	LD ₅₀ 30 g/kg (rat, oral)	Sweet white powder	Depressed activity, gastrointestinal disturbances. If diabetic- heart disease, blindness, nerve damage, kidney damage
Iron tablets	Iron sulfate $FeSO_4$	~5 adult tablets toxic for a 3 year old	Grayish white powder	Nausea, vomiting, diarrhea, black stool, liver damage, coma
Lead	Lead Pb	Lowest published dose 450 (human, oral)	Bluish or silvery solid	Acute –headache, insomnia, joint pain. Chronic-anemia, kidney disease, reproductive and developmental toxin.
Snake venom	α -bungarotoxin $C_{338}H_{529}N_{97}O_{105}S_{11}$	Not available	Large protein molecule	Paralysis, suffocation, loss of consciousness, seizures, hemorrhaging into tissues
Cola	Caffeine $C_8H_{10}N_4O_2$	LD ₅₀ 140 mg/kg (dog, oral)	White odorless powder or crystals	Acute renal failure, nausea, psychosis, hemorrhage, increased pulse, convulsions
Alcohol	Ethanol C_2H_6O	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 2000 mg/kg (rat, oral)	Yellow crystals, orange solid	Convulsions, unconsciousness, reproductive toxin