

A PANAP Factsheet Series
**Highly Hazardous
Pesticides**
Cypermethrin

Hazard to children:
acute poisoning, potential developmental effects, immunotoxic, endocrine disruptor; later in life breast cancer, male reproductive problems, Parkinson's disease



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Uses: synthetic pyrethroid insecticide. Related substances: alpha- beta- and zeta- cypermethrin.

Residues: in cord blood, newborn's meconium, breast milk, house dust, food, drinking water.^{1 2}

Acute toxicity: moderately toxic, neurotoxin. Symptoms include: dizziness, nausea, headaches, burning skin, tingling, fatigue, anorexia, muscle twitching, seizures, coma. Asthma symptoms in susceptible people.³ Death from contaminated food has occurred.⁴ Children have been poisoned in Nicaragua¹ and Mexico.⁵ Common cause of poisoning of farmers in Tanzania.⁶

Chronic toxicity: most frequent child chronic pesticide exposure in UK.⁷ Chronic exposure causes dysregulation of energy metabolism in mice.⁸

Neurological: behavioural effects, delayed mental development;^{9,10} altered dopamine activity in brain (mice);¹¹ implicated in Parkinson's disease.^{11 12}

Cancer: US EPA possible human carcinogen, based on tumours in rodents. "Complete carcinogenic

as well as tumour initiating and promoting potential" in studies on mice;¹³ breast cancer risk.¹⁴

Genotoxicity: genotoxic in human cells.^{15 16}

Endocrine disruption: oestrogenic causing breast cancer cells to grow;^{17 18} disrupts testosterone production (mice);^{19 20} anti-progestagenic (cow).²¹

Reproduction: significant adverse effects on male rodent reproductive system,²² reduces sperm production²² and motility;²³ abnormal sperm (rabbits).²⁴

Immune: suppresses immune system;²

Environmental effects:
Aquatic: highly toxic to fish, algae, aquatic invertebrates;² fish kills in US.³

Terrestrial: highly toxic to bees,² beneficial insects, earthworms.³ Secondary poisoning of birds from insects.³

Environmental fate: Severe marine pollutant; groundwater and surface pollutant.²⁵ Persistent in soil;² Potential for bioaccumulation.²

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