



Crop protection:: Pesticides::Antidotes

FIRST AID MEASURES AND ANTIDOTES RECOMMENDED
FOR REGISTERED PESTICIDES

ORGANOPHOSPHORUS PESTICIDES

S.No	Name of the pesticide	Symptoms of poisoning	First aid measures	Treatment/antidote
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28.	Acephate Anilophos Chlorfenvinphos Chlorpyrifos Diazinon Diclorovos (DDVP) Dimethoate Edifenphos Ethion Fenitrothion Fenthion Formothion Kitazin Malathion Methyl Parathion Oxydemeton-Methyl Phenthoate Phorate Phosalone Phosphamidon Primiphos methyl Profenophos Propetamphos Quinalphos Temephos Thiometon Triazophos Trichlorofon	Mild – anorexia, headache, dizziness, weakness, anxiety, tremors of tongue and eyelids, miosis, impairment of visual acuity. Moderate – Nausea, salivation, lacrimation, abdominal cramp, vomiting, sweating, slow pulse, muscular tremors, miosis. Severe – Diarrhoea, pinpoint and non-reactive pupils, respiratory difficulty, pulmonary edema, cyanosis, loss of sphincter control, convulsions, coma and heart block.	Remove the person from the contaminated environment. In case of (a) skin contact – Remove all contaminated clothings and immediately wash with lot of water and soap; (b) Eye contamination – Wash the eyes with plenty of cool and clean water; (c) Inhalation – Carry the person to the open fresh air, loosen the clothings around neck and chest, and (d) Ingestion – If the victim is fully conscious, induce vomiting by tickling back of the throat. Do not administer milk, alcohol and fatty substances. In case the person is unconscious make sure the breathing passages is kept clear without any obstruction. Victim's head should be turned to one side in the lying down position. In case of breathing difficulty, give mouth to mouth or mouth to nose breathing. Medical aid: Take the patient to the doctor/Primary Health Centre immediately along with the original container, leaflet and label.	<p>1. Airway protection</p> <p>2. Ensure clear airway</p> <p>3. Intubate the patient & aspirate the secretion</p> <p>4. Administer oxygen by mechanically assisted pulmonary ventilation, if respiration is depressed.</p> <p>5. Improve tissue oxygenation before atropine to minimise risk of ventricular fibrillation</p> <p>6. Atropine</p> <p>Adult & Children above 12 yrs.: 2-4 mg repeated every 15 minutes until pulmonary secretion controlled and atropinisation</p> <p>Children below 12 years: 0.05 – 0.1 mg/kg, repeat every 15 minutes. Minimum dose 0.1 mg in children. Maintain atropinisation by repeated dosing.</p> <p>Severely poisoned exhibit remarkable tolerance to atropine. Dose may be increased. Dosing interval may be increased. Continuous infusion may be needed. Nebulised atropine has been reported beneficial in respiratory distress.</p> <p>1. Glycopyrolate</p> <p>Alternative to atropine. Ampules of 7.5 mg added to 200 ml of saline and infused. This is very good in case of respiratory infection.</p> <p>1. Pralixodime (2PAM)</p> <p>To be used within 48 hour. Relieves nicotinic as well as muscarinic effect. Adult – 1.2 g i.v.infusion not more than 0.2 g/min. Children below 12 years – 20-50 mg/kg b.w. i.v.mixed with 100 ml and infused over 30 minutes</p> <p>1. Seizure control</p> <p>- Diazepam</p> <p>Adult – 5-10 mg i.v. Repeat every 5-10 minutes, Maximum 30 mg</p> <p>Children – 0.2-0.5 mg/kg i.v. Repeat every 5-10 minutes; Maximum 10 mg – above 5 years</p> <p>mg – below 5 years.</p> <p>- Lorazepam</p> <p>Adult: 2-4 mg i.v over 2-5 minutes. Repeat if necessary. Maximum 8 mg – in 12 hours period.</p> <p>Adolescent: Same as adult – Maximum – 4 mg.</p> <p>Children under 12 years- 0.05 – 0.10 mg/kg i.v over 2-5 minutes. Repeat if necessary 0.05 mg/kg 10-15 minutes after dose. Max. 4 mg.</p>

				Contra- indicators Morphine, succinyl choline, theophylline, phenothiazines & reserpine.
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