

**Crop protection:: Pesticides::Antidotes****FIRST AID MEASURES AND ANTIDOTES RECOMMENDED
FOR REGISTERED PESTICIDES****PHOSPHINE PESTICIDES**

S.No	Name of the pesticide	Symptoms of poisoning	First aid measures	Treatment/antidote
1. 2.	Aluminium phosphide *Zinc phosphide	Fatalities, severe gastro-intestinal symptoms, fatigue, headache, dizziness, thirst, cough, soreness of breath etc., In severe cases coma, convulsions, hypotension and pulmonary oedema develop. Death due to shock and peripheral circulatory failure.	Move patient to fresh air. Lay patient on his side to prevent aspiration of vomits. Remove patient to hospital. Give CPR if indicated. Preserve container to aid diagnosis. Warning: Do not give water or water based drinks.	Activated charcoal – slurry with sorbitol 30-100 g orally in adults, 15-30 g in children. – adsorbs phosphine Diazepam – Give undiluted and monitor BP respiration. 5-10 mg IV, slowly over 2-3 minutes (Max. rate: 5 mg/min) Repeat every 10-15 minutes. Maximum dose: 30 mg. Pediatric Dosage: 0.25-0.4 mg/kg IV, slowly over 2-3 min. Repeat every 2-5 min. Max. dose: 5 mg in children below 5 years and 10 mg in those above 5 years. Phenytoin – Monitor BP, ECG. 10-15 mg/kg slow IV (Max. rate: 50 mg/min.) 100 mg orally or IV every 6-8 hours (Max. dose 1000 mg.) Pediatric dosage: 15-20 mg/kg IV slowly (Rate: 1 mg/kg/min) 1.5 mg/kg every 30 min. Max. dose: 20 mg/kg/day. Dopamine – 4.6 microgram/kg/min IV (to treat hypotension & shock) Magnesium sulphate – 3 gm IV bolus followed by 6 gm in 12 hr. for 5-7 days. (Role controversial) Ranitidine – 50 mg IV every 8 hours Sodium bicarbonate - 50 mEq/15 min. If arterial bicarbonate is < 15 mmol/L. Intravenous fluids- 4-6 L over 6 hour. (Monitor by CVP) Furosemide – Low dose (may be tried for pulmonary oedema if systolic BP >90 mm HG). Gastric lavage is contraindicated as more phosphine is released upon contact with water in the stomach.