Topical or systemic antimicrobials should be given as necessary for secondary infections.

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Scabies

Scabies is a parasitic infection of the skin by the mite *Sarcoptes scabiei*. The main symptom is pruritus, which is caused by an allergic reaction to the parasite and may not occur until several weeks after infection for the first time. Subsequent infections usually result in pruritus after a few days. Pruritus may persist for some months after effective treatment with an acaricide, but is not necessarily an indication for further acaricidal treatment; rather, antipruritics should be used. A severe crusted form (Norwegian scabies) may occur rarely, particularly in immunocompromised or incapacitated patients.

Treatment is with the acaricides permethrin or malathion applied, preferably as aqueous lotions, to clean, cool, dry skin over the entire body and left on for 8 to 24 hours, depending upon the preparation. The preparation should be reapplied to the hands whenever they are washed during this period. In adults, it is not usually necessary to treat the face and scalp, but these areas should be treated in young children or patients with atypical or crusted scabies. A single treatment may be effective, but treatment is usually repeated after 7 to 10 days if necessary. Other drugs used topically in the treatment of scabies include benzyl benzoate, crotamiton, lindane, and sulfur; sulfiram is used with benzyl benzoate. A single oral dose of ivermectin may be effective. Close family and personal contacts should be treated at the same time and all clothes, towels, and bedding used by the infected person 2 days before treatment should be washed in hot water and dried in a hot dryer.

In addition to treatment with an acaricide, symptomatic treatment of the itching with crotamiton, calamine lotion, or systemic antihistamines or corticosteroids may be required.

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Vector control

Many pests are involved in the transmission of communicable diseases, and vector control[1,2] is an important part of the fight against such diseases. Insecticides are used in the control of filariasis (p.137) (*Aedes*, *Anopheles*, *Culex*, and *Mansonia* mosquitoes);[3] leishmaniasis (p.824) (*Phlebotomus* or *Lutzomyia* sandflies);[4] malaria (p.594) (*Anopheles* mosquitoes);[5-8] dengue fever (see Haemorrhagic Fevers, p.850) (*Aedes* mosquitoes);[9,10] onchocerciasis (p.137) (*Simulium* blackflies);[11] African trypanosomiasis (p.827) (*Glossina* tsetse flies);[12] and American trypanosomiasis (p.827) (*Triatoma* bugs).[13] The insecticide temefos is useful in dracunculiasis (p.136) (crustacean host to the guinea worm larvae). In some cases, as in filariasis or onchocerciasis, the insecticides used act mainly against the larval stage of the insect vector, whereas in other situations, as in malaria, activity is against the adult insect; in trypanosomiasis, activity is directed against both adult and immature stages. The majority of the experience gained in insecticidal vector control has probably been in malaria, and, for instance, a positive effect seen in the control of leishmaniasis has been considered to be mainly a byproduct of the concomitant malaria control programmes.

Insect repellents can provide personal protection against many insect vectors. For example, in malaria, insect repellents as well as the use of insecticides are important in preventing mosquito bites.

Molluscicides are used in the control of schistosomiasis (p.138) (*Bulinus* snails).[14]

Rodenticides are also extremely valuable in the vector control of some diseases such as leptospirosis (p.177), plague (p.186), rat-bite fever (p.164), and some haemorrhagic fevers (p.850).

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Aluminium Phosphide

Aluminum Phosphide; Fosfuro de aluminio.

AlP = 57.96.

CAS — 20859-73-8 (aluminium phosphide); 7803-51-2 (phosphine); 1314-84-7 (zinc phosphide).

Profile

Aluminium phosphide is used for the fumigation of grain and as a rodenticide. It releases phosphine (PH_3) in the presence of moisture and this accounts for its pesticidal activity. Phosphine gas has a garlic-like odour repulsive to man and domestic animals but apparently not to *rats*. Zinc phosphide is used similarly.

◊ References to poisoning associated with aluminium phosphide.

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Amitraz *(BAN, USAN, pINN)*

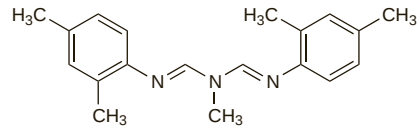
Amitratsi; Amitrazum; U-36059. *N,N′*-[(Methylimino)dimethylidyne]di-2,4-xylidine.

Амитраз

$C_{19}H_{23}N_3$ = 293.4.

CAS — 33089-61-1.

ATC Vet — QP53AD01.



Pharmacopoeias. In *BP(Vet)*. Also in *US* for veterinary use only.

BP(Vet) 2008 (Amitraz). A white to buff powder. Practically insoluble in water; decomposes slowly in alcohol; freely soluble in acetone.

Profile

Amitraz is used as a topical ectoparasiticide in veterinary practice. It is effective against various lice, mites, and ticks.

◊ References to poisoning with amitraz.

1. Jorens PG, *et al.* An unusual poisoning with the unusual pesticide amitraz. *Hum Exp Toxicol* 1997; **16:** 600–1.
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9. Avsarogullari L, *et al.* Acute amitraz poisoning in adults: clinical features, laboratory findings, and management. *Clin Toxicol* 2006; **44:** 19–23.
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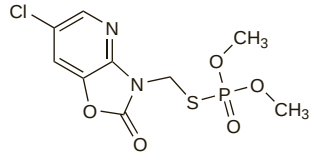
Azamethiphos *(BAN)*

Azametifós; CGA-18809; OMS-1825. *S*-[(6-Chloro-2,3-dihydro-2-oxo-1,3-oxazolo[4,5-*b*]pyridin-3-yl)methyl] *O,O*-dimethyl phosphorothioate.

$C_9H_{10}ClN_2O_5PS$ = 324.7.

CAS — 35575-96-3.

ATC Vet — QP53AF17.



Profile

Azamethiphos is an organophosphorus insecticide (p.2047) used in veterinary practice for the control of sea-lice infestation in salmon and for the control of ectoparasites in the environment.

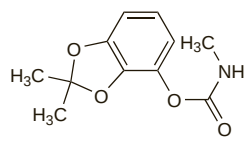
Bendiocarb

2,3-Isopropylidenedioxyphenyl methylcarbamate.

$C_{11}H_{13}NO_4$ = 223.2.

CAS — 22781-23-3.

ATC Vet — QP53AE03.



Profile

Bendiocarb is a carbamate insecticide (p.2037) for agricultural and household use.