



Veterinary Poisons Information Service (VPIS)

**Annual Report
2011**



The Veterinary Poisons Information Service (VPIS)

The VPIS is a 24-hour telephone emergency service for veterinary professionals and those working for animal welfare organizations providing information on the management of actual and suspected acute poisoning in animals.

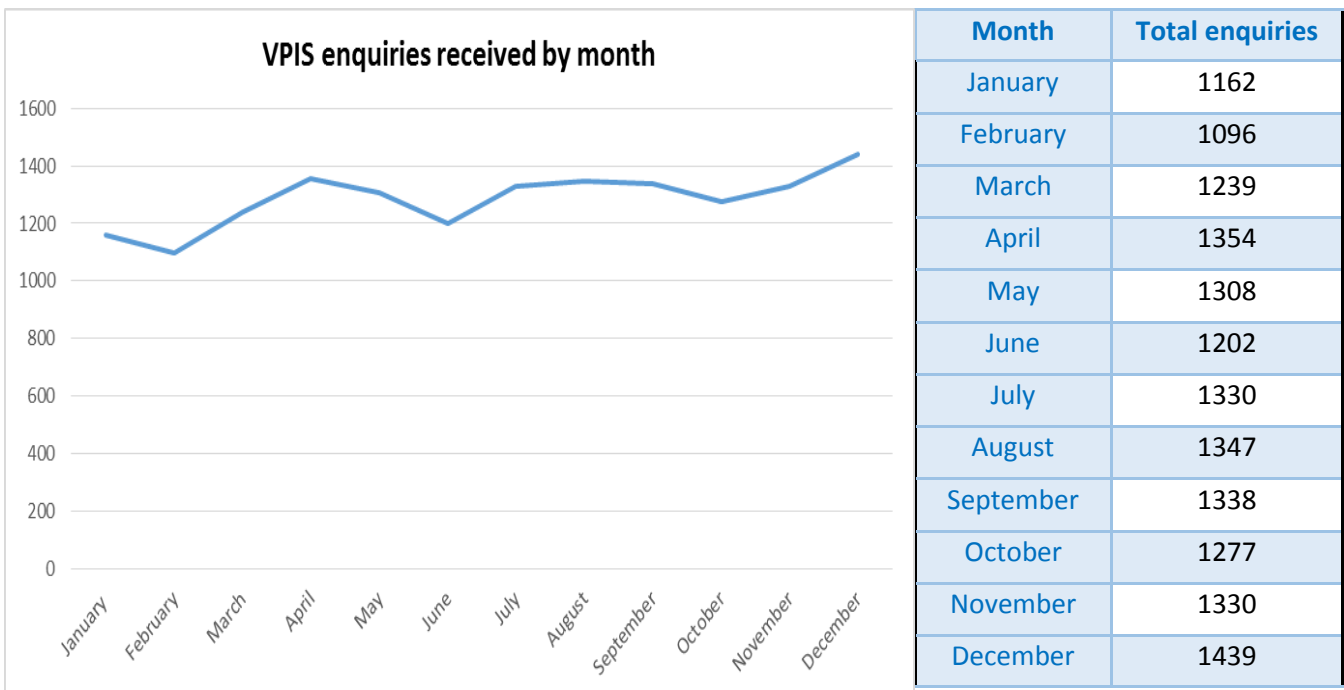
Advice for every consultation is tailored to the specific case in question and can include a risk assessment, information on anticipated clinical effects, a suggested treatment protocol and prognostic advice, with the aim of ensuring the animal receives appropriate and optimum treatment.

Enquiry load

In 2011 the VPIS received 15,422 enquiries, compared to 18,430 in 2010. There were 14 information requests without an animal involved, leaving 15,408 emergency poisoning enquiries.

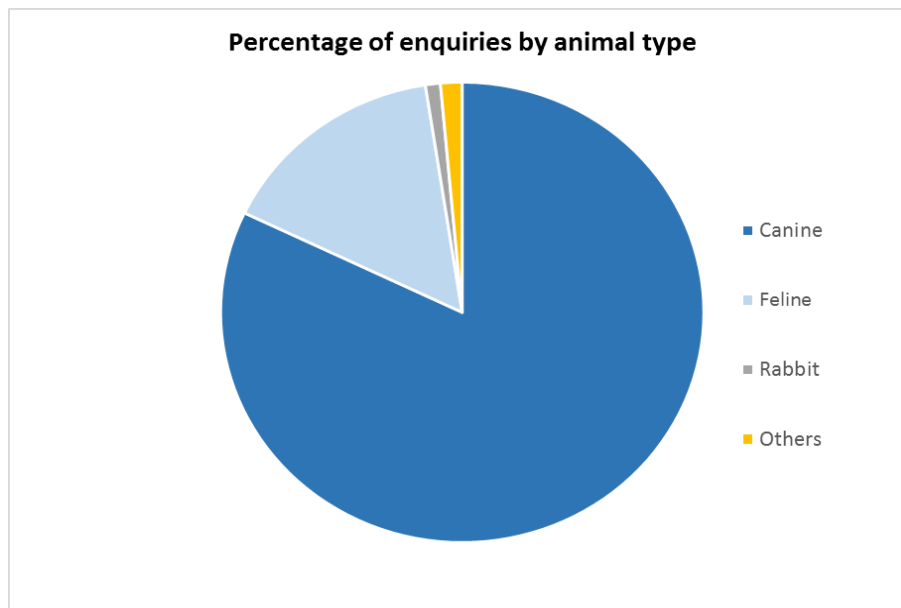
Monthly enquiry load

There was a steady increase in enquiries over the 12 months, except for small dips in February, June and October.



Enquiries by animal type

The VPIS will answer an enquiry about any animal. In 2011 the VPIS received enquiries about 15 different animal types, but dogs predominated (82.1%) followed by cats (15.4%).



| Animal | Total | Percentage |
|---------|-------|------------|
| Canine | 12652 | 82.1% |
| Feline | 2379 | 15.4% |
| Rabbit | 154 | 1.0% |
| Equine | 66 | <1% |
| Rodents | 36 | <1% |
| Bird | 33 | <1% |
| Cattle | 18 | <1% |
| Ferret | 16 | <1% |
| Sheep | 14 | <1% |
| Human | 12 | <1% |
| Reptile | 10 | <1% |
| Goat | 7 | <1% |
| Pig | 5 | <1% |
| Primate | 4 | <1% |
| Skunk | 2 | <1% |

Enquiries by agent

The 15,408 cases involved 19,498 agents which comprised drugs 41.0%, plants 13.8%, pesti-



| Agent group | Total | Percentage of total |
|--|-------|---------------------|
| Drugs | 7989 | 41.0% |
| Ibuprofen | 725 | |
| Paracetamol | 541 | |
| Oral contraceptives | 235 | |
| Carprofen | 148 | |
| Diclofenac | 124 | |
| Ethinloestradiol/ethinylestradiol/ethinyloestradiol | 123 | |
| Meloxicam | 120 | |
| Codeine | 108 | |
| Levothyroxine | 101 | |
| Pesticides | 2506 | 12.9% |
| Difenacoum | 418 | |
| Bromadiolone | 391 | |
| Permethrin | 217 | |
| Rodenticide unknown | 143 | |
| Imidacloprid | 125 | |
| Glyphosate | 120 | |
| Plants | 2690 | 13.8% |
| <i>Lilium</i> species | 228 | |
| <i>Quercus</i> species (oak) | 93 | |
| <i>Narcissus</i> species (daffodil) | 93 | |
| Unidentified plant | 62 | |
| <i>Aesculus hippocastanum</i> (horse chestnut) | 47 | |
| <i>Prunus laurocerusus</i> (cherry laurel) | 44 | |
| <i>Hedera helix</i> (ivy) | 44 | |
| <i>Cannabis sativa</i> (marijuana/hashish) | 44 | |
| <i>Tulipa</i> species | 44 | |
| Food plants | | |
| <i>Vitis vinifera</i> (grapes, sultanas, raisins, etc) | 357 | |
| <i>Allium cepa</i> (onion/shallot) | 67 | |
| Household products | 3599 | 18.5% |
| Fertiliser | 221 | |
| Battery - not button | 129 | |
| Food | 1634 | 8.4% |
| Milk chocolate | 689 | |
| Dark chocolate | 330 | |
| Chocolate | 241 | |
| Xylitol | 84 | |



| Agent group | Total | Percentage of total agents (n=19,498) |
|---------------------------------|-------|---------------------------------------|
| Animals | 298 | 1.5% |
| Adder | 141 | |
| Cosmetics and toiletries | 215 | 1.1% |
| Nappy rash cream | 22 | |
| Soap bar | 19 | |
| Hair colourant | 18 | |
| Nappy | 18 | |
| Fungi | 187 | 1.0% |
| Unidentified fungi | 113 | |
| Tremorgenic mycotoxins | 33 | |

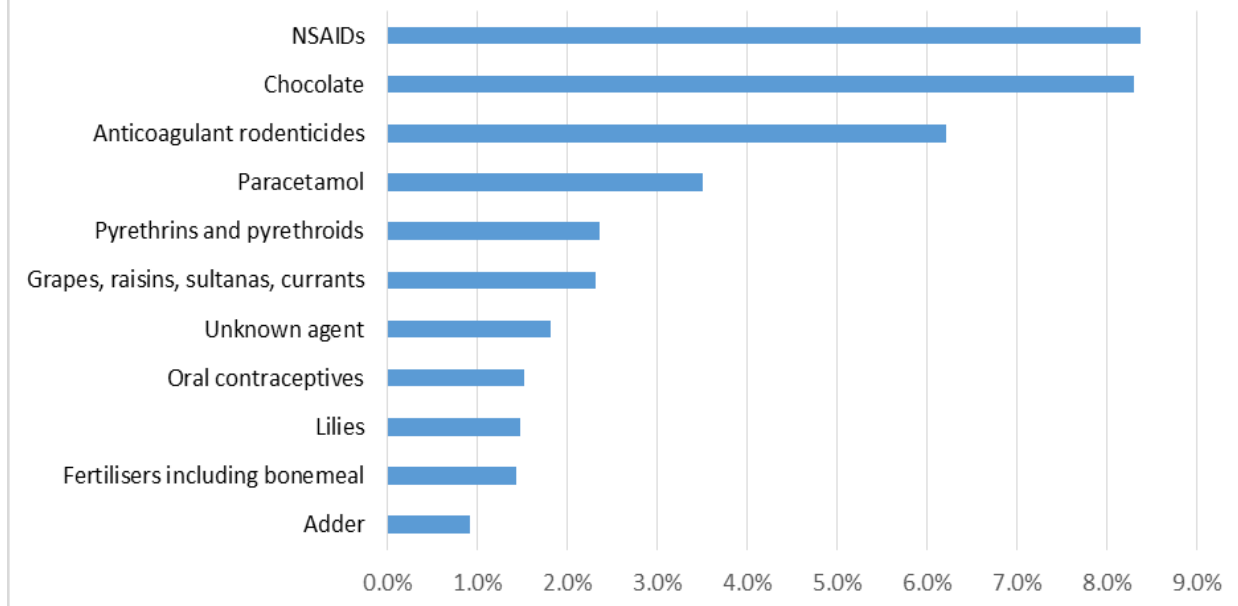
All animals - The top 10 enquiries

Overall the most common agent the VPIS received enquiries about was the analgesic ibuprofen (4.7%), however if all the different chocolate types that appear in the top ten are combined they comprise 8.2% of all enquiries. The enquiry numbers for the anticoagulant rodenticides bromadiolone and difenacoum totalled 5.3% of all enquiries.

| Agent name | Total | Percentage of total enquiries (n=15408) |
|--|-------|---|
| Ibuprofen | 725 | 4.7% |
| Milk chocolate | 689 | 4.5% |
| Paracetamol | 541 | 3.5% |
| Difenacoum | 418 | 2.7% |
| Bromadiolone | 391 | 2.5% |
| <i>Vitis vinifera</i> (grapes, raisins, sultanas, etc) | 357 | 2.3% |
| Dark chocolate | 330 | 2.1% |
| Unknown | 279 | 1.8% |
| Chocolate | 241 | 1.6% |
| Oral contraceptives | 235 | 1.5% |



Top agents - Percentage of annual total



Dogs - The top 10 enquiries

In dogs ibuprofen was the top agent, but all the chocolate enquiries in the top ten comprised 9.7% of all canine enquiries and bromadiolone and difenacoum 5.8%.

| Agent name | Total | Percentage of canine enquiries (n=12652) |
|--|-------|--|
| Ibuprofen | 698 | 5.5% |
| Milk chocolate | 662 | 5.2% |
| Paracetamol | 489 | 3.9% |
| Difenacoum | 388 | 3.1% |
| Bromadiolone | 346 | 2.7% |
| <i>Vitis vinifera</i> (grapes, raisins, sultanas, etc) | 341 | 2.7% |
| Dark chocolate | 326 | 2.6% |
| Chocolate | 239 | 1.9% |
| Oral contraceptives | 219 | 1.7% |
| Unknown | 195 | 1.5% |



Cats - The top 10 enquiries

Lilium species (lily) was the most common agent the VPIS was consulted about in cats (6.7%), followed by the insecticide permethrin (5.3%).

| Agent name | Total | Percentage of feline enquiries (n=2379) |
|-----------------------|-------|---|
| <i>Lilium</i> species | 160 | 6.7% |
| Permethrin | 127 | 5.3% |
| Unknown | 80 | 3.4% |
| Imidacloprid | 59 | 2.5% |
| White spirit | 57 | 2.4% |
| Benzalkonium chloride | 53 | 2.2% |
| Paracetamol | 47 | 2.0% |
| Praziquantel | 47 | 2.0% |
| Ethylene glycol | 47 | 2.0% |
| Fipronil | 42 | 1.8% |

Rabbits - The top enquiries

In rabbits bromadiolone was the most common enquiry, followed by lilies.

| Agent name | Total | Percentage of rabbit enquiries (n=154) |
|---------------------------|-------|--|
| Bromadiolone | 15 | 9.7% |
| <i>Lilium</i> spp | 12 | 7.8% |
| <i>Hedera helix</i> (ivy) | 8 | 5.2% |
| Fenbendazole | 7 | 4.5% |
| Milk chocolate | 5 | 3.2% |
| Glyphosate | 5 | 3.2% |



Follow up data

The VPIS sends out postal questionnaires to collect data on the clinical course, treatments given and outcome of a proportion of cases. In 2011, 3,906 (25.4%) follow up questionnaires were sent and 2107 cases (13.7%) were returned.

In over half the cases where follow up information was received the animal made a full recovery. Over a quarter of the animals remained asymptomatic. A fatal outcome was recorded in 6.2% of cases (4.7% euthanized and 3.0% died). Note that euthanasia may be an outcome due to financial constraints on the owner and not directly due to toxicity.

| Outcome | Total (n=2107) | Percentage |
|--------------------------------|-------------------|------------|
| Full recovery | 1126 | 53.4% |
| Fine throughout | 552 | 26.2% |
| Euthanized | 98 | 4.7% |
| Died | 64 | 3.0% |
| Not known | 60 | 2.8% |
| Unrelated to exposure | 35 | 1.7% |
| Full recovery (query related) | 30 | 1.4% |
| Not applicable (not poisoning) | 26 | 1.2% |
| Ongoing | 20 | <1% |
| Not known - referred | 16 | <1% |
| Died (query related) | 15 | <1% |
| Did not present | 14 | <1% |
| Euthanized (unrelated) | 13 | <1% |
| Euthanized (query related) | 10 | <1% |
| Improving but ongoing | 10 | <1% |
| No follow up | 8 | <1% |
| Died (unrelated) | 7 | <1% |
| Query related | 6 | <1% |
| Not specified | 5 | <1% |



Cases with known outcome—dogs

In dogs there was a fatal outcome in 90 cases (which were thought to be due to poisoning). Of these 39 dogs died and 51 were euthanized. The most common agent associated with a fatal outcome was 'agent unknown', that is where poisoning was suspected as the cause of them clinical signs but the specific agent could not be identified.

One dog that was euthanized had been given caustic soda (sodium hydroxide) instead of washing soda (soda crystals, sodium carbonate) as an emetic by the owner after an ingestion of flocoumafen. It was euthanized a few hours later after developing massive swelling and severe oral burns.

| Agent | Died | Euthanized |
|---|------|------------|
| Unknown | 12 | 12 |
| Ethylene glycol | 2 | 1 |
| <i>Vitis vinifera</i> (grapes, raisins, sultanas, etc) | | 3 |
| Difenacoum | | 3 |
| Sodium hydroxide | | 3 |
| Adder | 1 | 1 |
| Metaldehyde | 1 | 2 |
| Hymenoptera (bee, wasp stings) | | 2 |
| Tremorgenic mycotoxins | | 2 |
| Fluorouracil | 1 | 2 |
| Bromadiolone | 1 | 1 |
| Calcipotriol | | 2 |
| Nitroxynil | 2 | |
| Phenobarbital | 2 | |
| Amitriptyline | 1 | |
| Anemone species, <i>Liatris spicata</i> , <i>Oxalis</i> species, blue green algae | 1 | |
| Botulinum | 1 | |
| Brodifacoum | 1 | |
| Cyclamen species | 1 | |
| Cypermethrin | 1 | |
| Dishwasher tablet | 1 | |
| Fabric cleaning liquid | 1 | |
| Laburnum species | 1 | |
| Paracetamol | 1 | |
| Propiconazole | 1 | |
| Prothioconazole, trifluoxystrobin, metsulfuron-methyl, thifensulfuron-methyl | 1 | |
| Fabric cleaning liquid | 1 | |



Cases with known outcome—dogs (continued)

| Agent | Died | Euthanized |
|---|-----------|------------|
| <i>Quercus</i> species (oak) | 1 | |
| Rapeseed oil | 1 | |
| Shampoo | 1 | |
| Strychnine | 1 | |
| White spirit | 1 | |
| Aglepristone | | 1 |
| Fungi (unidentified species) | | 1 |
| Dark chocolate | | 1 |
| Pot pourri | | 1 |
| Anticoagulant rodenticide unknown | | 1 |
| Olanzapine | | 1 |
| Paraquat | | 1 |
| Potassium permanganate | | 1 |
| Fabric protector | | 1 |
| Ibuprofen and sodium chloride | | 1 |
| Ivermectin | | 1 |
| Acepromazine | | 1 |
| Colchicine | | 1 |
| Blue green algae | | 1 |
| Calcitriol | | 1 |
| Foreign body (unknown metal) | | 1 |
| Molluscicide and wood treatment unknown | | 1 |
| Total | 39 | 51 |



Cases with known outcome—cats

There was 34 fatal cases in cats; 20 cats died and 14 were euthanized. The most common agent involved in fatal cases was ethylene glycol (n=13), followed by permethrin (n=6).

| Agent | Died | Euthanized |
|------------------------------|-----------|------------|
| Ethylene glycol | 6 | 7 |
| Unknown | 3 | 1 |
| Fabric cleaning liquid | 1 | |
| Imidacloprid and moxidectin | 1 | |
| Neem oil | 1 | 1 |
| Paracetamol | 1 | |
| Permethrin | 5 | 1 |
| <i>Prunus spinosa</i> (sloe) | 1 | |
| Pyriproxyfen | 1 | |
| Ibuprofen | | 1 |
| Imidacloprid | | 1 |
| Insecticide unknown | | 1 |
| Ivermectin | | 1 |
| Total | 20 | 14 |

Cases with known outcome—other animals

There were 4 incidents involving multiple cases of poisoning and deaths in chickens and cattle. In addition two rabbits were euthanized.

| Agent | Animal | Died | Euthanized |
|---|----------|-----------------------------------|------------|
| Diquat | Chickens | An unknown number in one incident | |
| <i>Taxus baccata</i> (yew) | Cattle | 2 in one incident | |
| Urea | Cattle | At least 6 | |
| <i>Helleborus foetidus</i> (stinking hellebore) | Cattle | 3 in one incident | |
| Metaldehyde | Rabbit | - | 1 |
| <i>Platanus x acerifolia</i> (London plane) | Rabbit | | 1 |



Publications

Sutton N. 2011 Canine poisoning from fruits of the *Vitis vinifera* (grapes, raisins, currants and sultanas) – what do we know so far? Control & Therapy Series 263:38-39.

Bates N. 2011 Adder bites in dogs. Vet Nurse 2(5):242-246.

Sutton NM, Bates N, Campbell A. 2011 Canine adder bites in the UK: a retrospective study of cases reported to the Veterinary Poisons Information Service. Vet Rec 169:607.

Sutton NM, Bates N. 2011 Comment on case report: ethylene glycol toxicity in a cat – Dr Leah Richards. Control & Therapy Series 264:36.

Creedy N, Bates N. 2011 Ingestion of multiple magnets by a dog. Vet Rec 169:504.

de Pennington N, Colles C, Dauncey E. 2011 Australian stringhalt in the UK. Vet Rec 169:476.

Education, outreach and collaborations

VPIS lectured at the Royal Veterinary College (RVC), British Small Animal Veterinary Association (BSAVA) local division (Devon,) British Veterinary Nursing Association, the Veterinary Trust Conference in Scotland and visiting staff from the Norway Poison Centre staff.

VPIS presented to the BSAVA Council in March and attended the Annual Animal Welfare Fund (AWF) Conference and Reception in May. Alexander Campbell also took part, with Elizabeth Rozanski, from Tufts University, Massachusetts, in the BSAVA Roadshow in September covering Surrey and Sussex, East Anglia, Devon and Belfast.

VPIS had a stand at the Veterinary Practice Managers Association (VPMA) Congress in Kenilworth in January, the BSAVA Annual Congress in Birmingham in April, the Northern Vet Show in Leeds in June and the London Vet Show in November. Alexander Campbell gave four lectures at the BSAVA Congress in April.

For more information

Email us on info@vpisglobal.com

