



# **Veterinary Poisons Information Service (VPIS)**

**Annual Report  
2010**



## 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

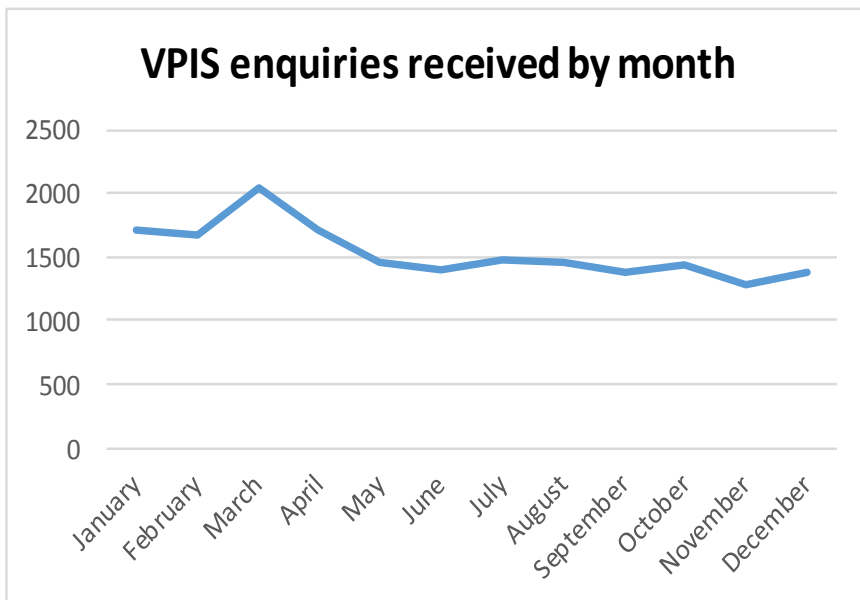
---

In 2010 the VPIS received 18,430 enquiries, compared to 21,608 in 2009. Of these enquiries 120 were classified as not applicable and did not involve cases of poisoning (they were admin or account enquiries). There were therefore 18,310 enquiries related to poisoning.

### Monthly enquiry load

---

The number of enquiries peaked in March and then declined until stabilising in May. This decline this was probably in relation to a new payment structure introduced in April 2010.

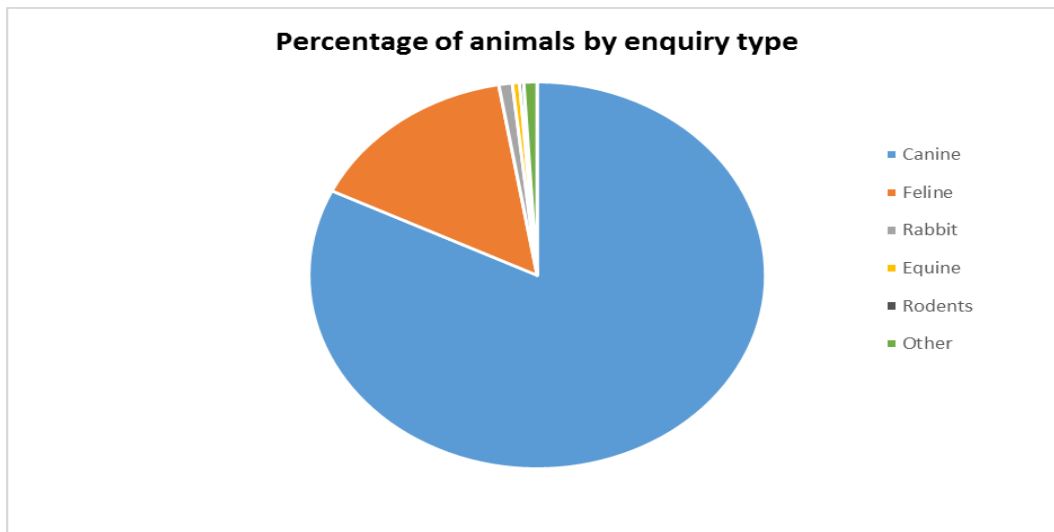


Month	Total enquiries
January	1717
February	1681
March	2040
April	1706
May	1466
June	1403
July	1475
August	1461
September	1380
October	1436
November	1288
December	1377



## Enquiries by animal type

The VPIS will answer an enquiry about any animal. In 2010 the VPIS received enquiries about 18 different animal types, but dogs predominated (82%) followed by cats (15%).



Animal	Total	Percentage
Canine	15052	82%
Feline	2766	15%
Rabbit	175	0.9%
Not applicable	120	0.6%
Equine	94	0.5%
Rodents	52	0.2%
Bird	49	<0.1%
Cattle	30	<0.1%
Sheep	26	<0.1%
Goat	17	<0.1%
Pig	12	<0.1%
Ferret	11	<0.1%
Reptile	8	<0.1%
Human	7	<0.1%
Camelid	4	<0.1%
Hedgehog	2	<0.1%
Primate	2	<0.1%
Antelope	1	<0.1%
Bat	1	<0.1%
Skunk	1	<0.1%

## Enquiries by agent

The 18,310 cases involved 22,200 agents which comprised drugs 39.7%, plants 14.1%, pesticides 11.8%, household product 9.7%, animals 1.2%, cosmetic and toiletries 1.0% and fungi 0.9%.



Agent group	Total	Percentage of total agents
<b>Drugs</b>	8815	39.7%
Ibuprofen	912	
Paracetamol	632	
Oral contraceptives	315	
Carprofen	193	
Diclofenac	190	
Meloxicam	131	
Ethinylestradiol	112	
Praziquantel	108	
Levothyroxine	108	
<b>Plants</b>	3120	14.1%
<i>Lilium</i> species	250	
<i>Narcissus</i> species (daffodil)	94	
<i>Hedera helix</i> (ivy)	67	
Unidentified plant	57	
<i>Aesculus hippocastanum</i> (horse chestnut)	56	
<i>Tulipa</i> species	52	
<i>Cannabis sativa</i> (marijuana, hashish)	52	
<b>Food plants</b>		
<i>Vitis vinifera</i> (grapes, sultanas, raisins, etc)	541	
<i>Allium cepa</i> (onion, shallot)	82	
<b>Pesticides</b>	2620	11.8%
Bromadiolone	486	
Difenacoum	436	
Permethrin	218	
Rodenticide not known	175	
Glyphosate	132	
<b>Household products</b>	2152	9.7%
Battery - not button	158	
Fertiliser not known	103	
Bonemeal	96	
Fertiliser - solid	94	
<b>Food</b>	1865	8.4%
Milk chocolate	710	
Chocolate	440	
Dark chocolate	365	
Xylitol	91	



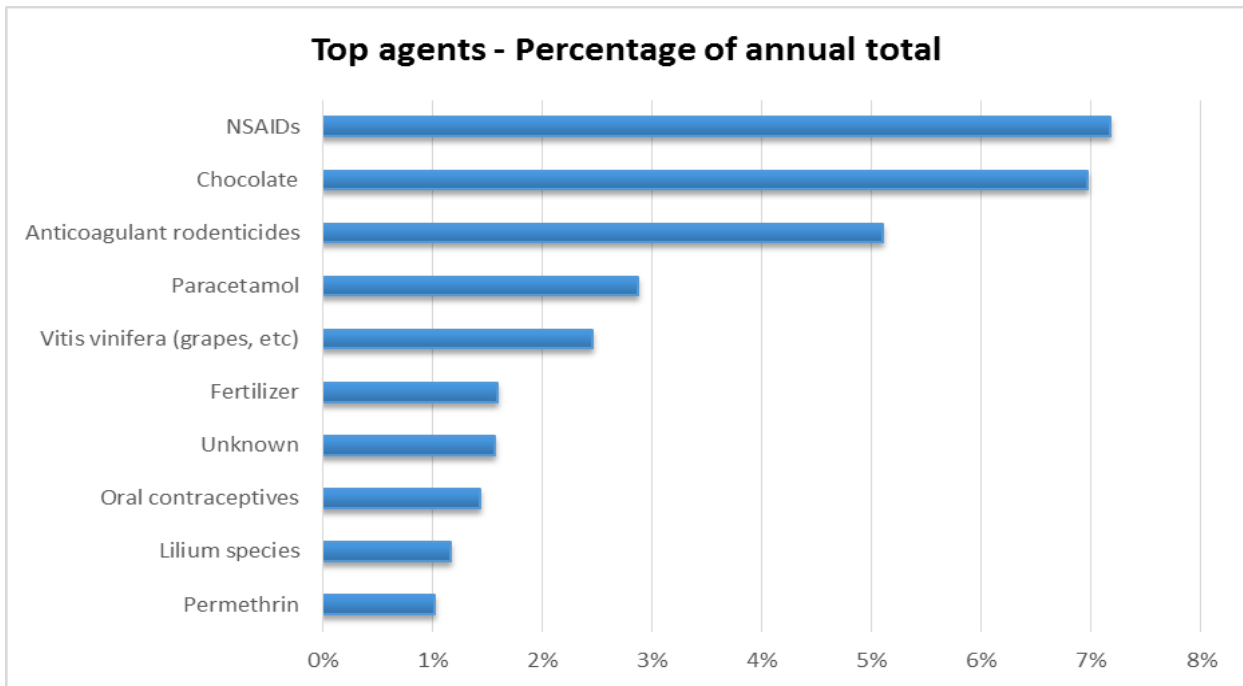
Agent group	Total	Percentage of total agents
<b>Animals</b>	257	1.2%
Adder	125	
<b>Cosmetics and toiletries</b>	219	1.0%
Nappy rash cream	25	
Soap bar	23	
Hair colourant	15	
Soap liquid	13	
<b>Fungi</b>	199	0.9%
Unidentified fungi	125	
Tremorgenic mycotoxins	34	

## All animals - The top 10 enquiries

Overall the most common agent the VPIS received enquiries about was the analgesic ibuprofen (5.0%), however if all the different chocolate types that appear in the top ten are combined they comprise 8.3% 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=18310)
1. Ibuprofen	917	5.0%
2. Milk chocolate	713	3.9%
3. Paracetamol	637	3.5%
4. <i>Vitis vinifera</i> (grapes, sultanas, etc)	546	3.0%
5. Bromadiolone	510	2.8%
6. Difenacoum	463	2.5%
7. Chocolate	446	2.4%
8. Dark chocolate	369	2.2%
9. Unknown	348	1.9%
10. Oral contraceptives	318	1.7%





### Dogs - The top 10 enquiries

In dogs ibuprofen was the top agent, but all the chocolate enquiries in the top ten comprised 9.9% of all canine enquiries and bromadiolone and difenacoum 5.8%.

Agent name	Total	Percentage of canine enquiries (n=15052)
1. Ibuprofen	881	5.8%
2. Milk chocolate	700	4.7%
3. Paracetamol	560	3.7%
4. <i>Vitis vinifera</i> (grapes, sultanas, etc)	528	3.5%
5. Bromadiolone	457	3.0%
6. Chocolate	434	2.9%
7. Difenacoum	410	2.7%
8. Dark chocolate	364	2.4%
9. Oral contraceptives	305	2.0%
10. Unknown	223	1.5%



## Cats - The top 10 enquiries

*Lilium* species (lily) was the most common agent the VPIS was consulted about in cats (6.8%), followed by the insecticide permethrin (5.5%).

Agent name	Total	Percentage of feline enquiries (n=2766)
1. <i>Lilium</i> species	188	6.8%
2. Permethrin	153	5.5%
3. Unknown	108	3.9%
4. Paracetamol	72	2.6%
5. Praziquantel	63	2.3%
6. Benzalkonium chloride	61	2.2%
7. White spirit	59	2.1%
8. Luminous novelties	50	1.8%
9. Imidacloprid	46	1.7%
10. Ethylene glycol	44	1.6%

## Rabbits - The top enquiries

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

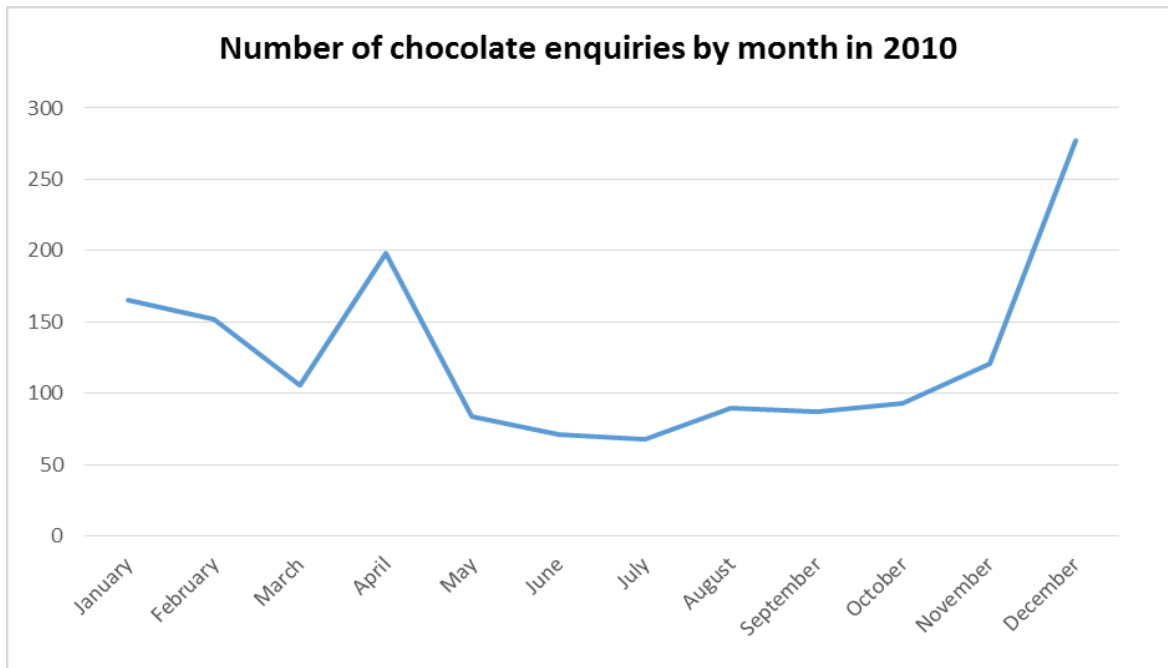
Agent name	Total	Percentage of rabbit enquiries (n=175)
Fenbendazole	10	5.7%
Bromadiolone	9	5.1%
<i>Rheum species</i> (rhubarb)	8	4.6%
<i>Hedera helix</i> (ivy)	7	4.0%
<i>Lilium</i> species	6	3.4%
Difenacoum	5	2.9%
<i>Spathiphyllum</i> species (peace lily)	4	2.3%
<i>Euphorbia pulcherrima</i> (poinsettia)	4	2.3%
Permethrin	4	2.3%
<i>Yucca</i> species	4	2.3%



## Seasonality of enquiries

---

There was a seasonal variability in some agents. This is always most obvious with chocolate, with peaks in enquiry numbers occurring near Easter and Christmas. Of all chocolate enquiries over the year, 42% occurred in January, April and December.



## 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 2010 3,438 follow up questionnaires were sent (24% of cases). Follow up and outcome data were available for 1,296 cases (37.7% of follow ups sent). This was lower than usual because the VPIS changed to a new database and there was a delay before the follow up function was operational. Delayed follow up resulted in a reduced number of returned questionnaires.

In almost half the cases where follow up information was received the animal made a full recovery. Almost a third of animals remained asymptomatic. A fatal outcome was recorded in 4.9% of cases (2.2% euthanized and 2.7% died). Note that euthanasia may be an outcome due to financial constraints on the owner and not directly due to toxicity.





Outcome	Total (n=1296)	Percentage
Full recovery	621	48%
Fine throughout	388	30%
Not known	53	4.1%
Died	35	2.7%
Euthanized	29	2.2%
Not applicable (not poisoning)	28	2.2%
Did not present	20	1.5%
Unrelated to exposure	20	1.5%
No follow up	19	1.5%
Not known (referred)	15	1.2%
Full recovery (query related)	14	1.1%
Ongoing	12	<1%
Euthanized (unrelated)	10	<1%
Improving but ongoing	10	<1%
Died (query related)	8	<1%
Euthanized (query related)	8	<1%
Not specified	5	<1%
Query related	1	0.2%
Died (unrelated)	0	-

### ***Cases with known outcome—cats***

There was only follow up in two fatal feline cases, one cat died after ethylene glycol ingestion and one was euthanized after exposure to patio cleaner containing benzalkonium chloride.

Agent	Died	Euthanized
Benzalkonium chloride	1	
Ethylene glycol		1
<b>Total</b>	<b>1</b>	<b>1</b>

### ***Cases with known outcome—dogs***

In dogs there was a fatal outcome in 62 cases (which were thought to be due to poisoning). Of these 35 dogs died and 28 were euthanized. The most common agent associated with a fatal outcome was 'agent unknown', that is where poisoning was suspected as the cause of the clinical signs but the specific agent could not be identified. Metaldehyde and adder bite were next most common agents associated with a fatal outcome.



## Cases with known outcome—dogs

Agent	Died	Euthanized
Agent unknown	4	6
Metaldehyde	1	5
Ethylene glycol	1	4
Adder	3	1
Difenacoum	2	
Cyclizine	2	
Calcipotriol	2	1
Xylitol (and chocolate peanuts)	1	
Smoke	1	
Phenylpropanolamine	1	
Metallic zinc	1	1
Metallic lead	1	
Hymenoptera (bee sting)	1	
<i>Hedera helix</i> (ivy)	1	
Fungi - Unidentified	1	
Food - sweets	1	
Doramectin	1	
Cypermethrin	1	
Chocolate	1	
Chloroquine	1	
Calcitriol	1	
Bromadiolone	1	
Anticoagulant rodenticide nk	1	
Anacardium occidentale (cashew), sodium chloride, wasp sting	1	
Amitraz	1	
Alphachloralose	1	
Xylitol/E967		1
<i>Vitis vinifera</i> (grapes, sultanas, raisins, etc)		1
Pentobarbital		1
Moxidectin / Praziquantel		1
Mesalazine/mesalamine		1
Formaldehyde		1
Fluorouracil		1
Ethanol		1
Disinfectant		1
Blue green algae		1
<b>Total</b>	<b>34</b>	<b>28</b>



## **Publications**

---

Sutton N, Bates N. 2010 Comment and reply. Oak poisoning in a horse. *Control & Therapy Series* 258:7.

## **Education, outreach and collaborations**

---

VPIS lectured at Cambridge University, the Royal Veterinary College (RVC), British Small Animal Veterinary Association (BSAVA) local divisions (Gloucester and Bristol) and to PDSA nurses.

VPIS had a stand at the BSAVA Annual Congress in April in Birmingham, the London Vet Show in October and the Emergency and Critical Care (ECC) Congress in November in Harrogate. Alexander Campbell chaired one of the sessions at the BSAVA congress.

## **For more information**

---

Email us on [info@vpisglobal.com](mailto:info@vpisglobal.com)

