

ANNUAL REPORT

2005



NATIONAL POISONS INFORMATION CENTRE

Beaumont Hospital,
P.O. BOX 1297,
Beaumont Road,
Dublin 9.



Telephone

+3531 837 9964 / 809 2566



Fax

+ 3531 836 8476



E-mail

npicdublin@beaumont.ie

INTRODUCTION

The Poisons Information Centre provides a national information service to doctors and other healthcare professions on the toxicity, features and management of poisoning. A limited service is provided to the general public e.g. advice on need for immediate medical attention. The Centre provides a 24 hour service 365 days a year. Enquiries are answered by our own Poisons Information Officers between 8am and 10pm while night-time calls are automatically diverted to the UK National Poisons Information Service (NPIS). The extra call charges are borne by Beaumont Hospital so there are no additional costs to callers.

The Centre keeps written records of all enquiries using a standard call report form. In the future we may also tape record telephone enquiries. Details of all enquiries are logged on a computer database (UKPID) which is used to generate reports. Selected enquiries are followed up (usually by telephone) to determine the severity of poisoning and the outcome of the case.

The Centre is staffed by a medical Director, a Manager, 3.5 fte Poisons Information Officers and a Clerical Officer (Appendix 1). The Poisons Information Officers and Manager are science graduates and all have a master's degree or a post-graduate diploma/certificate in medical toxicology. The Director is a consultant anaesthetist in Beaumont Hospital.

All staff participate in continuing professional development by attending in-house programmes, meetings of Specialists in Poisons Information in the UK and Ireland, courses and conferences organised by the European Association of Poisons Centres and Clinical Toxicologists (EAPCCT).

The Centre uses a variety of information sources including a paper database, computer databases, textbooks, articles from the medical and scientific literature and material safety data sheets provided by industry. The computer databases include TOXBASE, POISINDEX, ChemKnowldege, TICTAC, UKPID, INTOX, INCHEM, the NPIS Datasheet Compendium and Poisonous Plants of Great Britain and Ireland.

TOXBASE, the first tier database of the UK National Poisons Information Service, was made available to Irish A&E departments and Intensive Care Units in February 2001, as an enhancement of our service. The database is funded by the Department of Health and Children through Beaumont Hospital so the only costs to individual A&E departments are for the necessary hardware and on-line costs. In 2005 an additional 11 users registered bringing the total number of Irish users to 62. Irish users logged on to TOXBASE for 8224 sessions in 2005, a 10.3% increase compared to 2004 (Figure 1).

ENQUIRIES

The Centre received a total of 12,655 enquiries in 2005, a decrease of 5.3% from 2004. This is a smaller decrease than in recent years and may reflect the fact that most A/E departments are now registered to use TOXBASE (Figure 1). 3453 (Figure 2) of these calls were answered by the NPIS in the UK and are not included in the following analysis. 9202 enquiries were answered by our own Poisons Information Officers between 8am and 10pm. The majority of these enquiries (99.8%) were received by telephone and only a small number by letter, fax, e-mail or visit. TOXBASE use increased from 7380 user sessions in 2004 to 8224 in 2005.

Figure 1: Number of enquiries before and after the introduction of TOXBASE

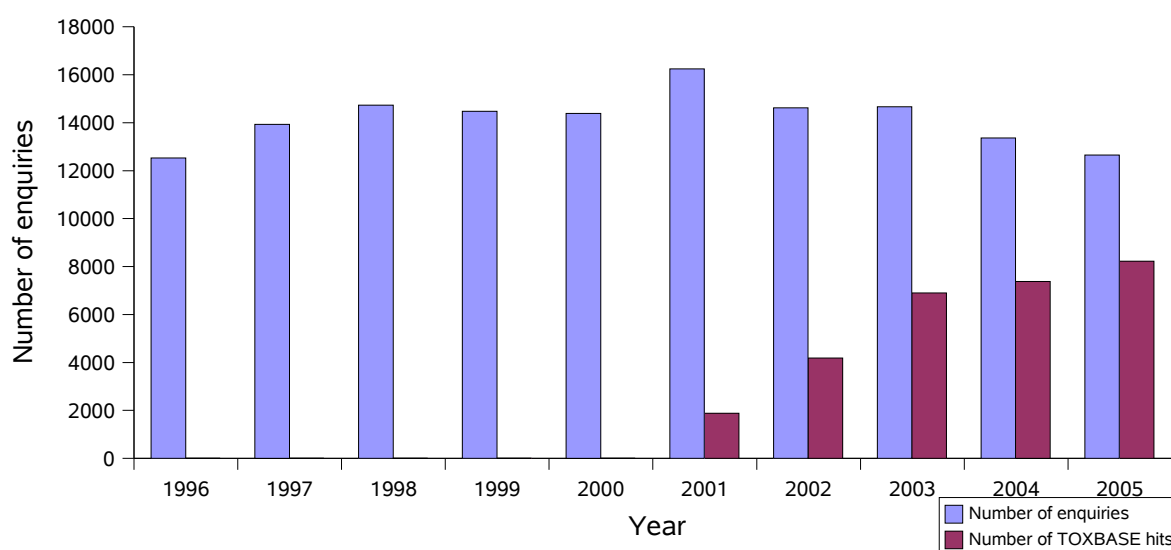
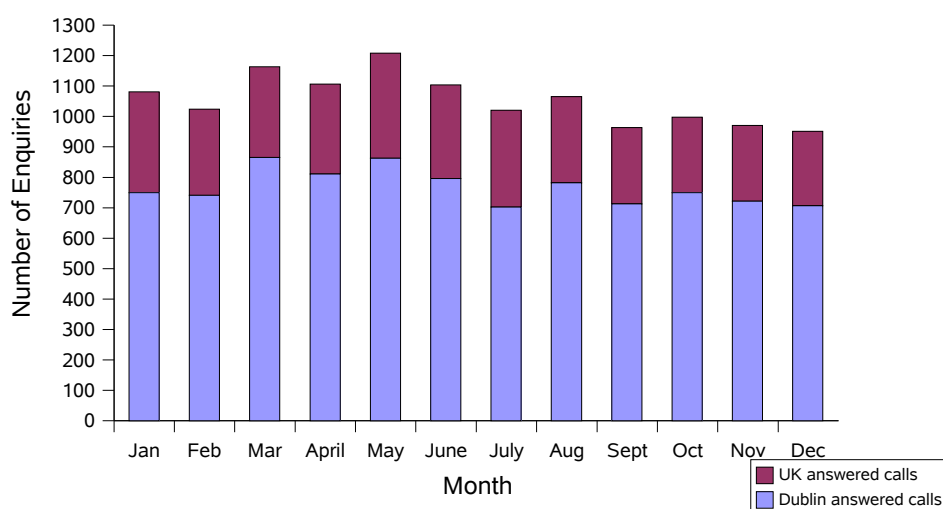


Figure 2. Month of enquiry



Origin of enquiries

2062 (22.4%) enquiries were from the Dublin area, 673 (7.3%) from the Cork area and 575 (6.2%) from the Kerry area (Table 1). 8996 (97.8%) enquiries concerned human cases of poisoning, 78 (0.85%) animals and 128 (1.4%) were non-emergency requests for information.

Hospitals, GP's and members of the public were the most frequent callers (Table 2). In comparison to last year the proportion of hospital calls dropped from 48.7% to 45.1% reflecting the increased use of TOXBASE by A&E departments. 4023 (43.7%) enquiries were from doctors, 2703 (29.4%) from nurses, 1945 (21.1%) from members of the public (Figure 3). 1417 (15.4%) enquiries were from GP co-ops (Figure 4).

Figure 3. Breakdown of Enquirers

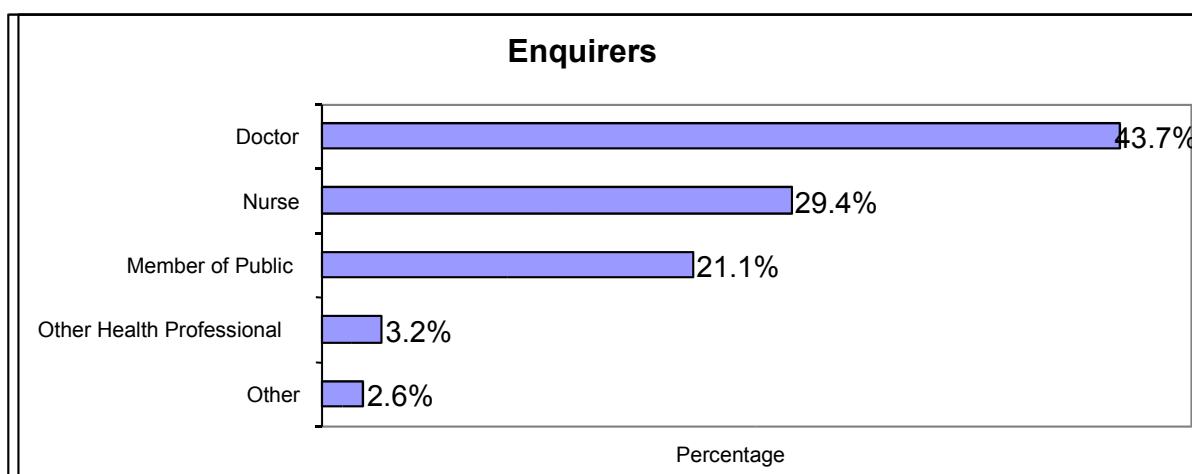
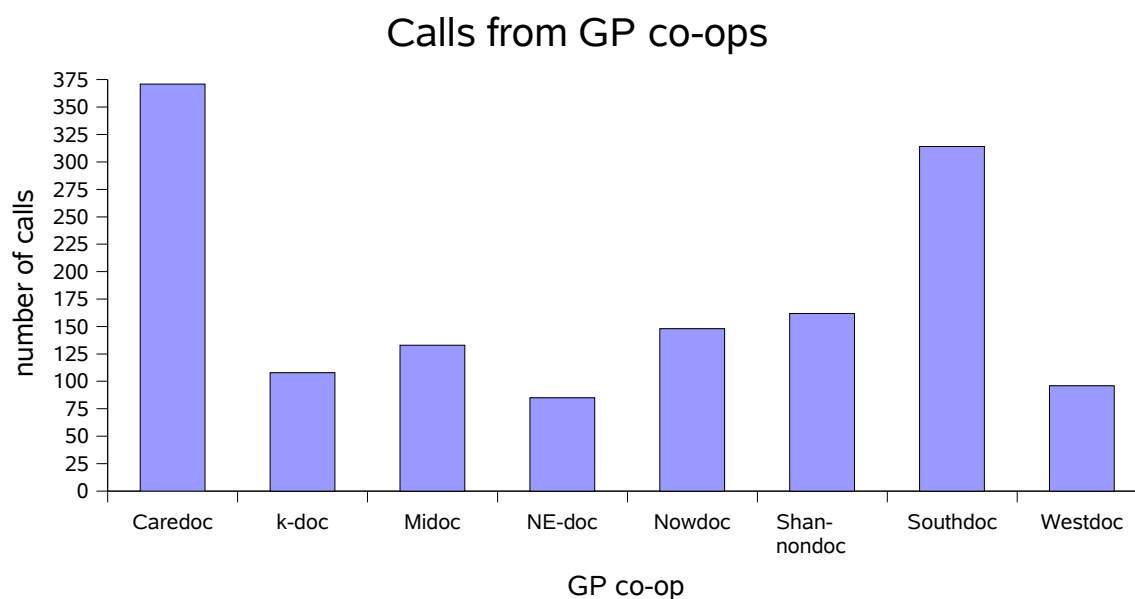


Figure 4. Number of calls from GP co-ops



Human cases of poisoning

2285 (25.4%) enquiries were about adults (≥ 20 years) and 4377 (48.7%) involved children under 10 years (Table 3). Males outnumbered females in the children under the age of 10 years. There was a slight predominance of females in the older age groups. However, in the 15-19 year group the female:male ratio was 2.1:1.

Most cases of poisoning occurred in the home or a domestic setting (Table 4). A small proportion occurred at work, in hospitals and nursing/residential homes.

177 cases were followed up. 138 of these recovered completely, 10 cases suffered sequelae, 14 patients died and the outcome of 15 cases could not be determined.

Agents in human cases

The enquiries about human cases involved 14,870 agents. As in previous years most cases involved drugs, industrial chemicals or household products (Table 5). Drugs were most frequently ingested by all age groups. However, the majority of cases involving household products, cosmetic & personal hygiene products and plants were children under 10 years.

OTHER ACTIVITIES

Developments/innovations

- In July 2005 the UK National Poisons Information Service introduced a night service rota shared between three Centres, in Birmingham, Cardiff and Newcastle. This has meant that night-time calls (10pm to 8am) to the Dublin Poisons Information Centre are now diverted to one of these centres instead of solely to the Cardiff Centre.
- Night-time calls accounted for 27.8% of calls during January to June 2005 and 26.7% during July to December. This indicates that the introduction of the UK rota in July has not caused any significant reduction in use of the service at night.
- The Centre became actively involved in the Information Management Accreditation team during 2005, represented by Nicola Cassidy and Niamh Walsh. As a result protocols are now in place for all the Centres activities and areas for quality improvement have been identified.

Training

- Niamh Walsh and Annette Cooke attended the EAPCCT Congress in Berlin in May 2005, including the one-day Continuing Education in Toxicology symposium prior to the Congress and presented two posters at the meeting.
- Feargal O'Connor, Poisons Information Officer, obtained the Certificate in Medical Toxicology, with distinction, from the University of Wales in Cardiff.
- Annette Cooke obtained the ECDL.
- Staff participated in the Dignity & Respect at work – Phase 1 training session linked to the staff meeting on 23rd November.

- Nicola Cassidy, Poisons Information Officer, completed the pilot HITS programme.
- Nicola Cassidy and/or Niamh Walsh attended approximately seven meetings of the Information Management Accreditation team during the year.

Lectures/Presentations

- Dr Joseph Tracey, Nicola Cassidy and Patricia Casey provided two continuing education workshops for community pharmacists during the year (in Dublin and Kilkenny), organised by the Irish Centre for Continuing Pharmaceutical Education. The topics covered in the workshops included "The role of the Poisons Information Centre", "Management of the poisoned patient", "Poison prevention", "Paracetamol overdose" and "Drugs of Abuse". Further workshops may be organised in 2006.

Committees/Meetings

- Dr Joseph Tracey, Director, continues as one of the Irish representatives on the EU Panel of Experts on Biological and Chemical Warfare Agents which meets in Brussels and the UK National Poisons Information Service Management Board which meets in London. He attended meetings of these boards during the year as well as the Council of the College of Anaesthetists (Dublin).

Publications

Papers

Morbidity and mortality following inadvertent poisoning with decanted chemicals.
Cassidy N, Tracey J.
IMJ 2005; 98 (6); 175-178.

Safety of newer generation anti-epileptic drugs in non-accidental overdose: an Irish population study.
Sukumaran S, Herbert J, Tracey J, Delanty N.
Seizure 2005; 14: 151-156

Renal and liver transplantation for toxin-induced organ failure.
Tracey JA, Casey PB, Cunningham P, Counihan A, Fleming J, Hickey D, Hegarty J.
Clinical Toxicology 2006 *In press*

Abstracts

Has paracetamol legislation led to an increase in the use of salicylates and ibuprofen analgesia in overdose?
Walsh N, Donohoe E, Cooke A, Tracey JA.
Clinical Toxicology 2005; 43 (5): 490.
The epidemiology of poisoning in the elderly Irish population.
Cassidy N, Lee SKK, Donegan CF, Tracey JA.
Clinical Toxicology 2005; 43 (5): 492.

Appendix 1. Staff

Director:	Dr Joseph A Tracey MB, BCh, DCH, FFARCSI, DABA
Manager:	Ms Patricia Casey BSc, DipMedTox
Poisons Information Officers:	Ms Nicola Cassidy BSc, MMedSc, DipMedTox Ms Elaine Donohoe BSc, MSc, DipMedTox Mr John Herbert BSc, DipMedTox Mr Feargal O'Connor BSc, Certificate in Med Tox Ms Niamh Walsh BSc, MSc, DipMed Tox
Clerical Officer	Ms Annette Cooke

Table 1. Origin of enquiries

County	Number of enquiries (%)
HSE: Eastern Region - all	2526 (27.5%)
Dublin (city & county)	2062
Kildare	346
Wicklow	118
HSE: Midland Area	674(7.3%)
Offaly	262
Laois	222
Longford	17
Westmeath	173
HSE: Mid-Western Area	872 (9.5%)
Clare	136
Limerick	486
Tipperary North Riding (*)	250 <i>(includes Tipperary South Riding)</i>
HSE: North-Eastern Area	830 (9.0%)
Cavan	96
Louth	490
Meath	182
Monaghan	62
HSE: North-Western Area	512 (5.6%)
Donegal	336
Leitrim	12
Sligo	164
HSE: Southern Area	1248(13.6 %)
Cork	673
Kerry	575
HSE: South-Eastern Area	1310 (14.2%)
Carlow	421
Kilkenny	212
Waterford	379
Wexford	298
Tipperary South Riding	* <i>(included in Tipperary North Riding)</i>
HSE: Western Area	664 (7.2%)
Galway	474
Mayo	133
Roscommon	57
UK/EU	37 (0.4%)
Other/Unknown	529 (5.8%)
Total	9202

Table 2. Source of enquiry (human cases only)

Source	Number of enquiries	%
Hospital	4057	45.1
General Practitioner/Primary Care	2635	29.3
Member of public	1884	20.9
Community pharmacist	165	1.8
Carers	78	0.9
Industry/Manufacturer	34	0.4
School	22	0.2
Emergency Services	14	0.2
Public Health Medicine	11	0.1
Other/Unknown	96	1.1
Total (human cases only)	8996	100

Table 3. Age and sex of human cases

Age group	Female	Male	Unknown	Total	%
<1	137	161	46	344	3.8
1-4	1695	1869	124	3688	41.1
5-9	134	203	8	345	3.8
10-14	128	109	0	237	2.6
15-19	307	144	3	454	5.0
20-49	866	815	3	1684	18.7
50-69	233	212	5	450	5.0
≥70	90	60	1	151	1.7
Unknown	639	558	446	1643	18.3
Total	4229	4131	636	8996	100

Table 4. Location

Location	Number of enquiries	%
Home/domestic	7999	88.9
Work	236	2.6
Hospital	90	1.0
Nursing home	73	0.8
School	40	0.4
Other	92	1.0
Unknown	466	5.2
Total	8996	

Table 5. Agents in human cases

Agent	Age (years)									Total
	<1	1 – 4	5 – 9	10 – 14	15 – 19	20 – 49	50 – 69	≥70	Unknown	
Drugs	253	2615	246	248	797	2887	629	162	1252	9089
Industrial chemicals	86	1002	86	56	77	424	111	28	431	2301
Household products	105	1052	88	42	23	125	58	14	258	1765
Unknown	20	139	17	6	21	82	23	3	276	587
Agrochemicals	7	97	20	6	3	51	54	10	112	360
Plants	41	152	27	21	16	30	2	0	63	352
Cosmetics & personal hygiene products	21	222	12	9	8	25	2	8	31	338
Animal	2	4	2	9	1	9	0	0	12	39
Bacterial & Fungal	1	7	0	0	4	8	1	0	8	29
Other	1	0	0	0	0	0	0	0	9	10
Total	537	5290	498	397	950	3641	880	225	2452	14870

Table 6 Top 100 agents of 2005

Paracetamol
Ethanol
Ibuprofen
Codeine*
Diazepam
Aspirin
Surfactant/detergent/other
Sodium Hypochlorite
Caffeine*
Amoxicillin
Alprazolam
Pseudoephedrine
Coproxamol
Zopiclone
Bleach liquid
Olanzapine
Mixed Essential Oil
Oral Contraceptive
Flurazepam
Venlafaxine
Diclofenac
Multivitamins
Chlorpromazine
Zolpidem
Disinfectant/Antiseptic/Sanitiser
Inhalant preparation
Citalopram
Diphenhydramine
White spirit
Clavulanic acid
Fluoxetine
Brompheniramine
Petroleum distillate
Mefenamic Acid
Silica gel
Dessicant
Temazepam
Sodium Hydroxide
Carbamazepine
Quinine*
Amitriptyline
Sodium valproate
Chlordiazepoxide
Fabric cleaning liquid sachet/capsules
Dothiepin
Glyphosate
Risperidone
Multipurpose cleaner
Ecstasy

Aftershave/perfume etc
Paroxetine
Tramadol
Cocaine
Lithium
Sertraline
Mirtazepine
Descaler
Dishwasher tablet
Metallic Mercury
Washing up liquid
Nappy rash cream
Paraquat
Firelighter
Triprolidine
Folic acid
Lamotrigine
Thermometer
Quetiapine
Calcium carbonate
Domperidone
Dishwasher rinse aid
Levothyroxine/thyroxine
Sodium chloride
Herbal preparation
Prednisolone
Atenolol
Bleach NK
Hydrogen Peroxide
Nail varnish remover
Skin cream/lotion/gel
Warfarin
Ferrous sulphate
Vitamin C
Cefaclor
Fabric cleaning powder
Clonazepam
Citric acid
Chloroxylenol
Lansoprazole
Cyanoacrylate
Nimesulide
Cleaner NK
Montelukast
Fabric Cleaning Tablet
Toy Novelty
Atorvastin
Cannabinoids
Dextromethorphan
Bendroflumethiazide/Benzofluazide

*These agents are ingredients of common compound analgesics and do not contribute significantly to the acute toxicity of such products.

