



# NATIONAL POISONS INFORMATION CENTRE

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## ANNUAL REPORT 2006



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## 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 will also 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 by telephone to determine 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 permanent staff 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 & Ireland, and conferences organised by the European Association of Poisons Centres and Clinical Toxicologists (EAPCCT).

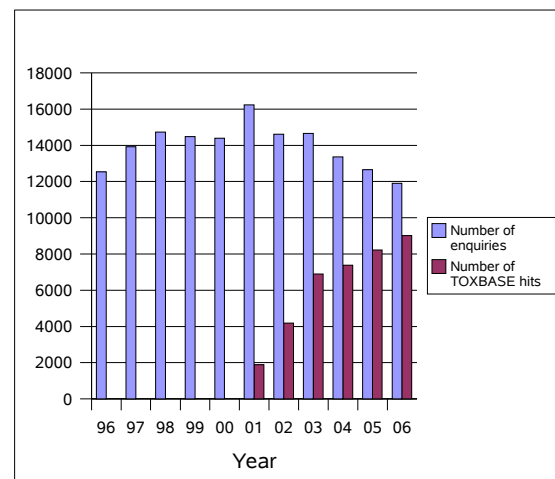
The Centre uses a variety of information sources including computer databases, a paper database, textbooks, articles from the medical and scientific literature and safety data sheets provided by industry. The computer databases include TOXBASE, POISINDEX, TICTAC, ChemKnowledge, UKPID, INTOX, INCHEM,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

## TOXBASE

TOXBASE is the first tier database of the UK National Poisons Information Service and is available on-line to registered Irish A&E departments and Intensive Care Units. The database is centrally funded by the Department of Health & Children, through Beaumont Hospital.

The total number of Irish users is now 68, including 34 hospital emergency departments. TOXBASE use increased from 8,224 user sessions in 2005 to 9,018 in 2006, a 9.7% increase (Figure 1).

Figure 1: Impact of TOXBASE



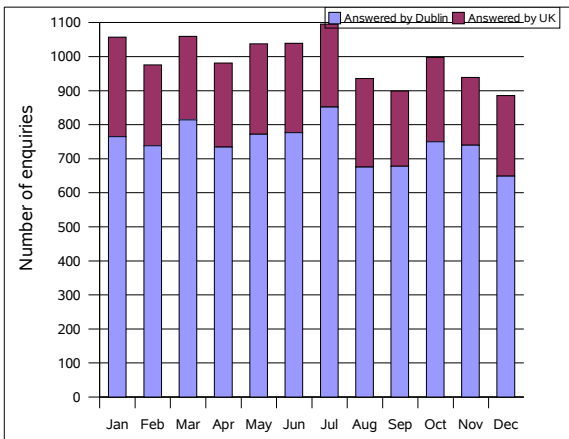
Note: TOXBASE was introduced in Feb. 2001

## ENQUIRIES

The Centre received a total of 11,905 enquiries in 2006, a decrease of 5.9% from 2005 (Figure 1).

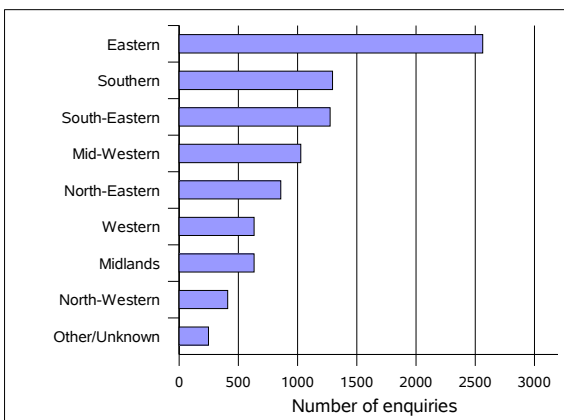
2960 (Figure 2) of these calls were answered by the NPIS in the UK and are not included in the following analysis. 8,945 enquiries were answered by our own Poisons Information Officers between 8am and 10pm. The majority of these enquiries (99.8%) were received by telephone and only a small number by letter, fax, e-mail or visit.

**Figure 2. Month of enquiry**



8729 (97.6%) enquiries concerned human cases of poisoning, 81 (0.9%) poisoning in animals and 135 (1.5%) were non-emergency requests for information.

**Figure 3. Enquiries by HSE Region**



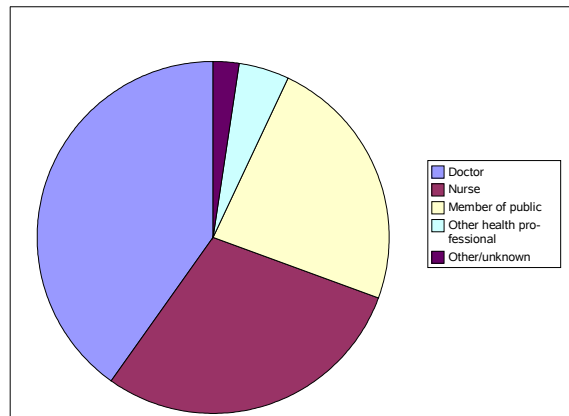
## Origin of enquiries

More than a quarter of enquiries were from the HSE Eastern Region (Figure 3) and these were predominantly from Dublin city and county (Table 1). Significant numbers of enquiries were also received from the Southern and South-Eastern areas.

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 45.1% to 37.3%, reflecting the increased use of TOXBASE by A&E departments.

3,599 (40.2%) enquiries were from doctors, 2,621 (29.3%) from nurses, 2,111 (23.4%) from members of the public (Figure 4).

**Figure 4. Type of Enquirer**

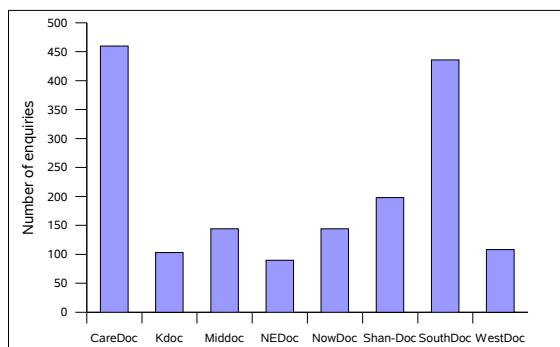


1,683 (18.8%) enquiries were from GP out-of-hours co-ops, particularly CareDoc and SouthDoc (Figure 5).

## Human cases of poisoning

4,542 (52.0%) enquiries involved children under 10 years (Table 3) and males outnumbered females in this age group. 2,056 (23.6%) enquiries were about adults ( $\geq 20$  years) with a slight predominance of females in the older age groups. However, in the 15-19 year group, the female:male ratio was 1.9:1.

**Figure 5. Calls from GP co-ops**



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

### Outcome

269 cases were followed up: 222 of these recovered completely, 8 patients suffered sequelae, 10 patients died and the outcome of 29 cases could not be determined.

### Agents in human cases

The enquiries about human cases involved 13,949 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

The centre organised a one-day Current Toxicology conference on 3<sup>rd</sup> November 2006, to celebrate 40 years of service. The Minister for Health, Ms Mary Harney TD, opened the conference which was attended by 61 staff from A&E departments and Intensive Care Units in Ireland.

We continue to divert our calls to the UK National Poisons Information Service between 10pm and 8am. While total call numbers decreased by 5.9% in 2006, we noted a greater reduction in calls at night (14.3% decrease in calls between 10pm and 8am vs 2.8% decrease in calls between 8am and 10pm). We do not know if this indicates problems with coding of Irish calls in the UK centres or a true decrease in night-time calls.

### Training

Feargal O'Connor and Dr Joseph Tracey attended the EAPCCT Congress in Prague, in April 2006, including the one-day Continuing Education in Toxicology symposium. They presented four posters at the meeting.

Dr Tracey participated in a Chemical Hazards Training Day in Dublin organised by the HSE in January 2006.

Dr Tracey attended two CPD days for consultant staff organised by the UK NPIS (in Edinburgh 27<sup>th</sup> June and Cardiff on 15<sup>th</sup> November).

Niamh Walsh received one day's training in generating reports from UKPID, in Cardiff, in March 2006.

John Herbert attended a CPD day for Clinical Toxicologists and Poisons Information Specialists in Birmingham in November 2006.

Nicola Cassidy attended the "Working Together to Improve Medication Management" study day in Beaumont Hospital, in December 2006.

Elaine Donohoe completed a six week evening course in statistical methods at Trinity College Dublin.

All staff attended the "Current Toxicology" symposium on 3<sup>rd</sup> November.

## Committees/Meetings

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

Nicola Cassidy and/or Niamh Walsh attended meetings of the Beaumont Hospital Information Management Accreditation team during the year and participated in the inspection of the hospital by the Irish Health Services Accreditation Board in May.

Elaine Donohoe joined the TOXBASE editing group in November 2006.

## Publications

### Papers

Pack-size legislation reduces severity of paracetamol overdoses in Ireland. Donohoe E, Walsh N, Tracey JA. *Ir J Med Sci.* 2006;175(3):40-2.

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* 2007; 45: 31-35.

### Abstracts

Morbidity from paediatric iron poisoning. Donohoe E, Tracey JA. *Clinical Toxicology* 2006; 44 (4): 493.

Inadvertent overdose with N-acetylcysteine: An unusual case. Cassidy N, Tracey JA. *Clinical Toxicology* 2006; 44 (4): 502.

Changing pattern of poisoning in Ireland over 40 years. Tracey JA. *Clinical Toxicology* 2006; 44 (4): 531-532.

Repeat enquiries to the National Poisons Information Centre of Ireland. Cassidy N, Tracey JA. *Clinical Toxicology* 2006; 44 (4): 546-547.

## Staff

### Director:

Dr Joseph A Tracey MB, BCh, DCH, FFARCSI, DABA

### Manager:

Ms Patricia Casey BSc, DipMedTox

### Clerical Officer:

Ms Annette Cooke

### Poisons Information Officers:

Mr John Herbert BSc, DipMedTox  
Ms Nicola Cassidy BSc, MMedSc, DipMedTox

Ms Elaine Donohoe BSc, MSc, DipMedTox

Mr Feargal O'Connor BSc, Certificate in Med Tox

Ms Niamh English BSc, MSc, DipMedTox

Mr Edward Baston BSc



*Poisons Information Officers past and present at the Current Toxicology Symposium in November.*

**Table 1. Origin of enquiries**

<b>Region</b>	<b>Number of enquiries (%)</b>
<b>HSE: Eastern Region – all</b>	
Dublin (city & county)	2032
Kildare	396
Wicklow	136
<b>HSE: Midland Area</b>	
Offaly	255
Laois	207
Longford	31
Westmeath	141
<b>HSE: Mid-Western Area</b>	
Clare	172
Limerick	505
Tipperary* (North and South Riding)	349
<b>HSE: North-Eastern Area</b>	
Cavan	149
Louth	470
Meath	175
Monaghan	65
<b>HSE: North-Western Area</b>	
Donegal	286
Leitrim	18
Sligo	107
<b>HSE: Southern Area</b>	
Cork	647
Kerry	649
<b>HSE: South-Eastern Area</b>	
Carlow	506
Kilkenny	203
Waterford	276
Wexford	289
<b>HSE: Western Area</b>	
Galway	467
Mayo	129
Roscommon	38
UK/EU	34
Other/Unknown	213
<b>Total</b>	<b>8945</b>

\* Tipperary South Riding is included in Tipperary North Riding

**Table 2. Source of enquiry**

<b>Source</b>	<b>Number of enquiries</b>	<b>%</b>
Hospital	3338	37.3
GP/Primary Care	2943	32.9
Member of public	2107	23.6
Community pharmacist	233	2.6
Carers	86	1.0
Veterinary	78	0.9
Industry/Manufacturer	32	0.4
School	31	0.3
Emergency Services	15	0.2
Media	12	0.1
Governmental	11	0.1
Other/Unknown	59	0.7
<b>Total</b>	<b>8945</b>	

**Table 3. Age and sex of human cases**

<b>Age group</b>	<b>Female</b>	<b>Male</b>	<b>Unknown</b>	<b>Total</b>	<b>%</b>
<1	124	168	52	344	3.9
1-4	1696	2045	84	3825	43.8
5-9	137	231	5	373	4.3
10-14	107	102	2	211	2.4
15-19	273	147	2	422	4.8
20-49	782	671	6	1459	16.7
50-69	224	181	1	406	4.7
≥70	108	82	1	191	2.2
Unknown	532	540	426	1498	17.2
<b>Total</b>	<b>3983</b>	<b>4167</b>	<b>579</b>	<b>8729</b>	

**Table 4. Location (human cases only)**

<b>Location</b>	<b>Number of enquiries</b>	<b>%</b>
Home/domestic	7696	88.2
Work	223	2.6
Hospital	102	1.2
Nursing home	90	1.0
School	60	0.7
Other	73	0.8
Unknown	485	5.6
<b>Total</b>	<b>8729</b>	



*Ms Annette Cooke, Clerical Officer, Ms Eileen Mackey, original Poisons Information Officer and Dr Joseph Tracey, Director of the Poisons Information Centre at the Current Toxicology Conference in November 2006.*

**Table 5. Agents in human cases**

<b>Agent</b>	<b>Age (years)</b>									<b>Total</b>
	<b>&lt;1</b>	<b>1 – 4</b>	<b>5 – 9</b>	<b>10 – 14</b>	<b>15 – 19</b>	<b>20 – 49</b>	<b>50 – 69</b>	<b>≥70</b>	<b>Unknown</b>	
Drugs	217	2562	285	210	687	2469	590	254	964	8238
Industrial chemicals	86	913	81	41	100	372	117	45	448	2203
Household products	106	1059	101	36	25	122	44	33	264	1790
Agrochemicals	1	82	20	2	3	27	30	8	106	279
Plants	37	168	21	13	22	20	3	3	92	379
Cosmetics & personal hygiene products	35	309	21	10	10	21	4	11	33	454
Other	2	7	4	8	3	12	0	0	20	56
Unknown	21	152	17	10	11	85	22	9	223	550
<b>Total</b>	<b>505</b>	<b>5252</b>	<b>550</b>	<b>330</b>	<b>861</b>	<b>3128</b>	<b>810</b>	<b>363</b>	<b>2150</b>	<b>13949</b>

**Table 6. Top agents of 2006 (human enquiries only)**

Paracetamol	Multipurpose Cleaner
Ethanol	Cetirizine
Ibuprofen	Sodium Valproate
Codeine*	Vitamin C
Amoxicillin	Metallic Mercury
Diazepam	Sodium Hydroxide
Surfactant/detergent other	Aftershave/perfume Etc
Aspirin	Calcium Carbonate
Caffeine*	Dothiepin
Multivitamins	Amitriptyline
Sodium Hypochlorite	Nimesulide
Zopiclone	Quetiapine
Alprazolam	Iron (unspecified)
Mixed Essential Oil	Firelighter
Venlafaxine	Acetone
Diclofenac	Glyphosate
Flurazepam	Domperidone
Clavulanic Acid	Coproxamol
White Spirit	Chlordiazepoxide
Olanzapine	Folic Acid
Oral Contraceptive	Fabric Cleaning Powder
Bleach Liquid	Montelukast
Silica Gel	Lithium
Desiccant	Sertraline
Pseudoephedrine	Methylphenidate
Inhalant Preparation	Toy/novelty
Disinfectant/antiseptic/sanitiser	Magnesium Carbonate
Nappy Rash Cream	Stain Remover
Fabric Cleaning Liquid Sachet/capsules	Bottle Sterilising Liquid
Citalopram	Nail Varnish
Mefenamic Acid	Heroin
Diphenhydramine	Descaler
Zolpidem	Bleach (unspecified)
Petroleum Distillate	Foreign Body
Carbamazepine	Dextromethorphan
Fluoxetine	Cefaclor
Chlorpromazine	Nicotine
Ecstasy	Rodenticide (unspecified)
Washing Up Liquid	Prednisolone
Lamotrigine	Ferrous Fumarate
Cocaine	Fabric Cleaning Liquid
Temazepam	Triprolidine
Fuel	Paroxetine
Dishwasher Rinse Aid	Herbal Preparation
Dishwasher Tablet	Salbutamol
Quinine*	Reboxetine
Sodium Chloride	Levothyroxine/thyroxine
Nail Varnish Remover	Cod Liver Oil/fish Oil
Tramadol	Fabric Cleaning Tablet
	Thermometer
	Citric Acid

*\* These agents are ingredients of common compound analgesics but do not contribute significantly to their toxicity.*



