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Annual Report 2008



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INTRODUCTION

The Poisons Information Centre (NPIC) provides a national information service to doctors and other healthcare professionals on the toxicity, features and management of poisoning. The service has never been promoted to the general public but some advice is given to members of the public who phone us e.g. advice on the 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 NPIS keeps contemporaneous written records of all enquiries using a standard call report form. Calls are also recorded, for quality assurance and training purposes. The digital voice recording system is activated automatically when a call is answered or made.

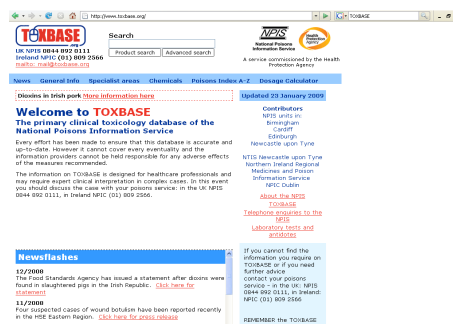
Enquiries are logged on a computer database (UKPID) which is used to generate reports. Selected enquiries are followed up by telephone to determine the outcome of the case. We are very grateful to the medical and nursing staff who take the time to give us this follow-up information.

The UK NPIS now keeps a centralised database of enquiries answered by all the UK Centres. This means that, for the first time, we can include in our annual report data on enquiries answered by the NPIS on our behalf.

All of our staff participate in continuing professional development by attending in-house programmes, joint CPD days with

the UK NPIS, and conferences organised by the European Association of Poisons Centres and Clinical Toxicologists (EAPCCT). Complex or unusual cases are discussed at staff meetings and these are a valuable source of continuing education.

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 and TICTAC.



STAFF

The Centre is staffed by a Medical Director, a Manager, 5 Poisons Information Officers (4.3 wte) and a Clerical Officer. The Poisons Information Officers and Manager are science graduates, some with master's degrees, and all have a post-graduate diploma/certificate in medical toxicology. The Director is a consultant anaesthetist in Beaumont Hospital.

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

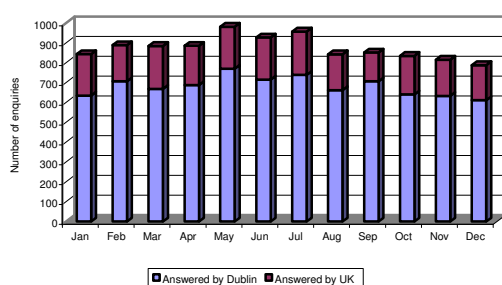
Mr Feargal O'Connor BSc, Certificate in Med Tox

Ms Niamh English BSc, MSc, DipMed Tox

ENQUIRIES

The Centre received a total of 10,494 enquiries in 2008, a decrease of 4.7% from 2007. 8170 enquiries (77.9%) were answered by our own Poisons Information Officers between 8am and 10pm, and 2324 (22.1%) calls were answered by the NPIS in the UK (Figure 1).

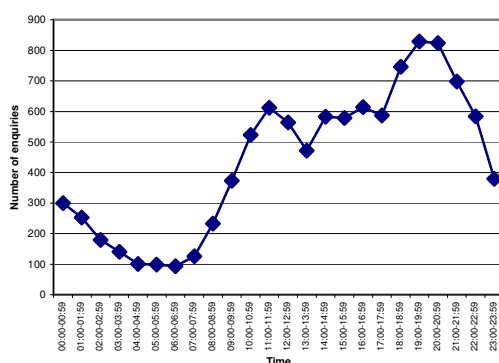
Figure 1. Month of enquiry



The majority of these enquiries (99.8%) were received by telephone and only a small number by letter, fax, e-mail or visit.

The Centre received an average of 28.7 calls per day in 2008 and 18:00-20:59 was the busiest time of day (22.9% of enquiries, Figure 2).

Figure 2. Time of enquiry



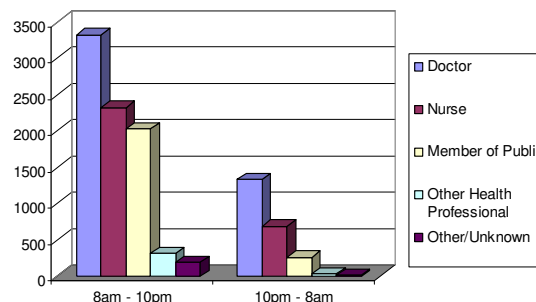
9911 (94.4%) enquiries concerned human cases of poisoning, 442 (4.2%) poisoning in animals and 141 (1.3%) were non-emergency requests for information.

Origin of enquiries

Hospitals, GP's/GP co-ops and members of the public were the most frequent callers (Table 1). 2379 (22.7%) enquiries were from GP co-ops, most frequently CareDoc and SouthDoc.

4649 (44.3%) enquiries were from doctors, 3009 (28.7%) from nurses and 2289 (21.8%) from members of the public (Figure 4). 24.8% of calls between 8am-10pm were from the general public, but from 10pm to 8am the public made just 11.1% of the enquiries.

Figure 3. Type of enquirer



Human cases of poisoning

4985 (50.3%) enquiries involved children under 10 years (Table 2) and males outnumbered females in this age group. 2848 (28.7%) enquiries were about adults (≥ 20 years) with a predominance of females in this age group.

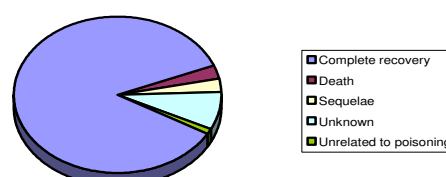
Most poisoning incidents occurred in the home or a domestic setting (Table 3). A small proportion occurred at work, in residential care homes and hospitals.

More than half (57.3%) of enquiries were about suspected accidental poisoning, 25.1% concerned intentional poisoning or recreational abuse and 10.1% were about therapeutic errors (Table 4).

Outcome

352 (3.6%) cases were followed-up. Most of these patients recovered completely but 10 patients suffered sequelae, 10 patients died, symptoms were not related to poisoning in 4 cases, and the outcome of 27 cases could not be determined.

Figure 5. Outcome of 352 cases followed-up



Agents in human cases

The 9911 enquiries about human cases involved 16,936 agents. As in previous years, most involved drugs, industrial chemicals or household products (Table 5). Drugs were most frequently ingested by all age groups. However, the majority of enquiries about household products and cosmetic/personal hygiene products concerned children under 10.

Figure 6. Agents and age groups

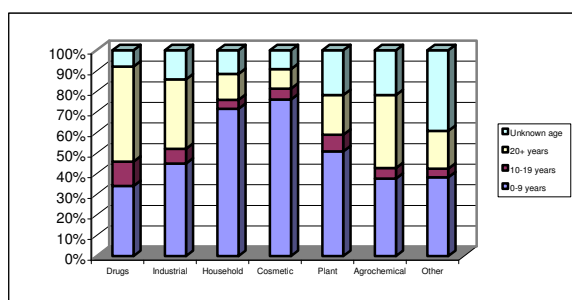


Table 6 shows the drugs we were asked about most frequently in 2008. Paracetamol remains the most common drug: in 1503 cases the product ingested contained this drug. Ibuprofen was the next most common drug (511 products). Ethanol was taken by 634 patients, usually in combination with other agents.

TABLES

Table 1. Source of enquiry

Source	Number of enquiries	%
Hospital	3982	38.0
GP/Primary Care	3666	34.9
Member of public	2316	22.1
Community pharmacist	208	2.0
Carers	78	0.7
Veterinary	78	0.7
School	31	0.3
Media	27	0.3
Emergency Services	21	0.2
Industry/Manufacturer	20	0.2
Other/Unknown	67	0.6
Total	10494	

Table 2. Age & sex of human cases

Age group	Female	Male	Unknown	Total	%
<1	183	215	51	449	4.5
1-4	1759	2190	138	4087	41.2
5-9	184	259	6	449	4.5
10-14	161	117	0	278	2.8
15-19	321	222	2	545	5.5
20-49	1096	973	7	2076	20.9
50-69	295	211	1	507	5.1
≥70	156	109	0	265	2.7
Unknown	519	354	382	1255	12.7
Total	4674	4650	587	9911	

Table 3. Location (human cases)

Location	Number of enquiries	%
Home/domestic	8908	89.9
Work	205	2.1
Nursing / care home	102	0.9
Hospital	92	1.0
Public place /community	79	0.8
School	49	0.5
Other	378	3.8
Unknown	98	1.0
Total	9911	

Table 4. Circumstances (human cases)

Circumstances	Number of enquiries	%
Accidental	5681	57.3
Intentional/Abuse	2491	25.1
Therapeutic error	1003	10.1
Adverse reaction	68	0.7
Other	438	4.4
Unknown	230	2.3
Total	9911	

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	337	3016	380	302	991	3835	852	381	870	10964
Chemicals	111	910	90	68	108	639	141	53	350	2470
Household products	130	1117	103	47	34	154	43	41	218	1887
Cosmetics & personal hygiene products	18	255	14	12	8	19	6	11	35	378
Plants	27	143	12	8	21	57	8	4	78	358
Agrochemicals (including home use)	7	82	14	4	10	60	28	9	60	274
Other	4	14	3	3	1	4	1	0	16	46
Unknown	22	177	11	4	18	78	16	12	221	559
Total	656	5714	627	448	1191	4846	1095	511	1848	16936

Table 6. Top 50 drug enquiries of 2008 in descending order of frequency (human cases only)

N.B. Inclusion in this list does not mean that these agents are toxic. It merely shows that the Poisons Information Centre received enquiries about these substances.

Paracetamol	Mefenamic Acid
Ibuprofen	Sodium Valproate
Codeine*	Cocaine
Aspirin	Quetiapine
Diazepam	Citalopram
Caffeine*	Cetirizine
Amoxicillin/amoxycillin	Herbal Preparation
Alprazolam	Temazepam
Zopiclone	Risperidone
Diclofenac	Lamotrigine
Escitalopram	Chlordiazepoxide
Venlafaxine	Amitriptyline
Oral Contraceptive	Lithium
Clavulanic Acid	Levothyroxine/thyroxine
Zolpidem	Montelukast
Olanzapine	Carbamazepine
Multivitamins	Domperidone
Drug Nk	Heroin
Fluoxetine	Tripolidine
Pseudoephedrine	Sertraline
Mirtazapine	Chlorpromazine
Diphenhydramine	Prednisolone
Tramadol	Calcium Carbonate
Flurazepam	Dextromethorphan
Ecstasy	Ferrous Sulphate

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

OTHER ACTIVITIES

Website

The Poisons Information Centre formally launched its new website, www.poisons.ie, in June 2008. The site is updated regularly and received on average 30 visits per day in 2008.



Poisons Prevention Leaflets

28,278 copies (400 orders) of the "Poisons Prevention Guidelines for your Home" leaflets were distributed on our behalf by the Health Promotion Department of the HSE (www.healthinfo.ie). These had been printed in 2007 thanks to funding from Beaumont Hospital Foundation.

Call recording

During 2008 we installed a recorded message to automatically inform callers that telephone calls to the Centre are recorded, and data stored electronically, for quality assurance and training purposes.

Peer review and Audit

The National Poisons Information Centre operates a system of peer review whereby all call forms are checked for completeness and accuracy by another Poisons Information Officer, on the same shift if possible. If data is missing the form is marked and returned to the Poisons Information Officer who originally answered the enquiry, for completion.

Calls were audited in January (634 calls) and June (715 calls) 2008:

- The proportion of calls reviewed within the target time of one hour increased

from 90% in January to 95% in June (shifts with only one Poisons Information Officer on duty were excluded).

- In January 92% of forms were complete before review and 99% after peer review. In June 94% were complete before review and 98% after review.

Antidote availability

The Centre carried out a survey of antidote availability in hospital pharmacies in November 2008. The replies received to date have already helped pharmacies locate the nearest stocks of antidotes on a number of occasions.

AWARDS

Ms Nicola Cassidy received an award at the Irish Health Service Quality and Safety Conference in April 2008, for her poster on "Public access poisons information, patient care processes and potential healthcare cost savings".

PUBLICATIONS

Papers

Poisoning in older adults: the experience of the National Poisons Information Centre.
N Cassidy, SKK Lee, CF Donegan, JA Tracey.
Irish Medical Journal 2008; 101(9): 268-270.

Letters

Cardiac arrest following therapeutic administration of N-acetylcysteine for paracetamol overdose.
N Cassidy, JA Tracey, SA Drew.
Clinical Toxicology 2008; 46 (9): 921.

Abstracts

The Poisons Triangle: Where do our patients go?
PB Casey, JA Tracey.
Clinical Toxicology 2008; 46 (5): 391.

Enquiries to the National Poisons Information Centre from members of the public.
N Cassidy, JA Tracey.
Clinical Toxicology 2008; 46 (5): 392.

TRAINING

February: Ms Nicola Cassidy attended the UK NPIS CPD day in Cardiff on 15th February and gave a talk on enquiries from members of the public.

Ms Patricia Casey attended a HSE workshop on the National Healthcare Records Management Audit Tool Training, in Tallaght Hospital on 13th February.

March: Ms Niamh English attended a three day ATSDR Basic course for Health Assessment and Consultation in Cork.

April: The Centre hosted the NPIS CPD day in Beaumont Hospital, Dublin, on 18th April. All NPIC staff attended at least part of the day. Mr John Herbert gave a presentation on poisoning from alcohol hand gels and Ms Elaine Donohoe presented a case of methaemoglobinaemia caused by aniline. Dr Tracey gave a talk on “Fats, proteins and sugars as antitoxins”.

Ms Nicola Cassidy presented a poster on “Public access poisons information, patient care processes and potential healthcare cost savings” at the Irish Health Service Quality and Safety Conference. She received an award for this work.

May: Mr John Herbert and Dr Joseph Tracey attended the EAPCCT XXVIII International Congress, in Seville, Spain, 7-9 May. Two posters were presented at the Congress, “The Poisons Triangle: Where do our patients go?” and “Enquiries to the National Poisons Information Centre from members of the public.”

July: Ms Nicola Cassidy and Dr Joseph Tracey attended the UK NPIS CPD Day on Chemical Terrorism, in Birmingham, on 18 July.

August: Ms Patricia Casey participated in the UKPID working group meeting in Cardiff on 5 August.

October: Ms Elaine Donohoe participated in the TOXBASE working group meeting in Birmingham, on 24 October.

November: Mr Feargal O'Connor attended the UK NPIS CPD Day in Edinburgh, on 13 November 2008.

COMMITTEES

Dr Tracey sits on the UK National Poisons Information Service Clinical Standards Group and attended four meetings of this group in 2008. He was a member of the expert group convened by the Chief Medical Officer in December 2008 to advise on the health risks from contamination of Irish pork with dioxins and PCBs. He continues as one of the Irish representatives on the EU Panel of Experts on Biological & Chemical Warfare Agents which meets in Brussels, and as Chairman of the Education Committee, College of Anaesthetists.

Nicola Cassidy or Annette Cooke attended meetings of the Beaumont Hospital Information Management Accreditation team during the year. Elaine Donohoe remains on the TOXBASE editing group and joined the Beaumont Hospital Communications Working Group in November. Patricia Casey is a member of the UKPID working group.

ACKNOWLEDGMENTS

Our thanks to Ms Gill Cooper, NPIS Cardiff, for collating the statistics on enquiries answered by all the UK NPIS Centres, and to the UK Centres for allowing the data to be used in this report.