

Executive summary

The core function of the National Poisons Information Centre (NPIC) is to provide information, rapidly, by telephone, to assist in the treatment of poisoning. In 2010 we answered 9330 enquiries about human poisoning and followed-up 361 serious or unusual cases of poisoning to determine the outcome. We also answered 355 additional enquiries which included non-emergency requests for information and enquiries about poisoning in animals. Follow-up is usually performed by telephone and can involve multiple calls to nursing and/or medical staff. We are very grateful to everyone who takes the time to talk to us when we call to follow-up a case.

Most enquiries were from medical and nursing staff in GP practices/co-ops and in hospitals. Some 22.9% of enquiries were from members of the public even though the Centre has never advertised its service to the general public. In 2011, a dedicated telephone number for the general public will be launched on a pilot basis, operating between 9am and 5pm, Monday to Friday. Our aim is to determine the workload a well advertised service for the public would generate and calculate the resources needed to provide such a service for at least 14 hours per day, every day of the year.

Overall, 59.4% of human cases were suspected accidental poisonings and 25.1% were cases of intentional self-poisoning or recreational abuse. Paracetamol remains the most common drug involved in human poisoning and laundry products the most common group of household product.

We continue to contract the UK National Poisons Information Service to answer enquiries between 10pm and 8am each day. This is a cost effective way to provide a 24 hour service and requires good, on-going communication with the UK centres. Our background activities during the year included surveillance of trends in poisoning, managing information on the composition of products and liaison with industry and relevant regulatory authorities.

Enquiries about recreational drugs sold in headshops became common during 2010 and in June the NPIC alerted the HSE Department of Public Health to significant adverse effects associated with the product "Whack". The HSE subsequently issued a warning to the general public about the drug. This illustrates the value of Poisons Centres in detecting new trends in poisoning and instigating preventative measures.

The task of providing product information to meet the needs of medical professionals under the Classification Labelling and Packaging Regulation and the Detergents Regulations was formally assigned to the National Poisons Information Centre in December 2010, when the Chemicals (Amendment) Act 2010 was passed by the Oireachtas. We had already been playing an active role in developing harmonised European guidelines for industry, which will specify the product information to be provided to poisons centres as well as the preferred format for electronic data exchange, and this work will continue in 2011.

As a small national centre, we are fortunate to have close links with the UK National Poisons Information Service, which enabled our staff to participate in CPD activities with our colleagues in the UK during the year. We were scheduled to host a CPD day for the UK Centres on 16 April 2010 but unfortunately this event had to be cancelled because of the transport problems caused by the volcanic ash cloud.

Dr Joseph Tracey retired at the end of November 2010 after 25 years as Director of the NPIC. He will be missed by all the NPIC staff, who wish him a happy and healthy retirement. We look forward to working with his successor, Dr Edel Duggan, who was appointed in December 2010.

INTRODUCTION

The National Poisons Information Centre (NPIC) provides an information service, mainly by telephone, to doctors and other healthcare professionals throughout Ireland, assisting them in the diagnosis and management of poisoning. The Centre did not promote its service to the general public during 2010 but did provide an emergency risk assessment and advice if contacted by members of the public.

The telephone information service operates 24 hours a day, every day of the year. Our own staff answer enquiries between 8am and 10pm each day, 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 main source of information used when answering enquiries is TOXBASE, the clinical toxicology database of the UK NPIS. A variety of other information sources are also available to staff.

The NPIC keeps written records of all enquiries which are then logged on a computer database (UKPID), and used to compile statistics. All in-coming and out-going calls are recorded, for quality assurance and training purposes.

Staff follow-up selected enquiries 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.

Information sources

Computer databases:

TOXBASE
POISINDEX
TICTAC

In-house database.

Textbooks.

Journal articles.

Safety data sheets.

STAFF

Director:

Dr Joseph A Tracey MB, BCh, DCH, FFARCSI, DABA
Dr Edel Duggan MB, BCh, BAO, FFARCSI, MD (from 1st December 2010)

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



The Poisons Information Officers and Manager staff the Centre's emergency phone lines between 8am and 10pm each day (7 days a week). They are all scientists with additional training and postgraduate qualifications in Medical Toxicology. If necessary, they can refer complicated or serious cases to the Director for further advice on treatment.

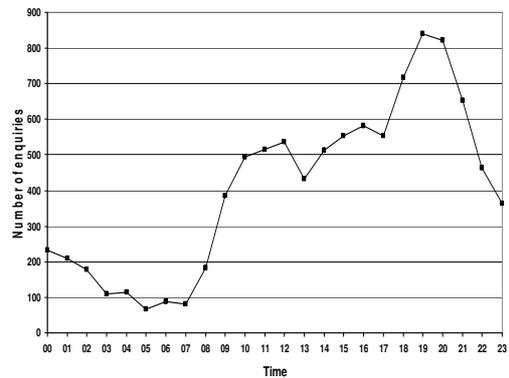
Dr Joseph Tracey, retired at the end of November 2010 after 25 years as Director of the NPIC. We welcomed Dr Edel Duggan as the Centre's new Director in December.

ENQUIRIES

The NPIC received 9685 enquiries in 2010, a decrease of 1.6% from 2009. We received 7781 of these enquiries (80.3%) between 8am and 10pm. The NPIS in the UK answered a further 1904 (19.7%) calls on our behalf.

The Centre received an average of 27 calls per day in 2010 and 18:00-20:59 was the busiest time of day (24.5% of enquiries, Figure 2).

9330 (96.3%) enquiries concerned human cases of poisoning, 71 (0.7%) poisoning in animals, 278 (2.9%) were requests for information and the nature of 6 (0.1%) enquiries was not documented.



Source of enquiry	Number of enquiries	%
GP/Primary Care	3702	38.2
Hospital	3216	33.2
Member of public	2220	22.9
Community pharmacist	229	2.4
Other/Unknown	318	3.3
Total	9685	

GP's/GP co-ops, hospitals and members of the public were the most frequent callers. 2523 (26.1%) enquiries were from GP co-ops, most frequently CareDoc and SouthDoc.

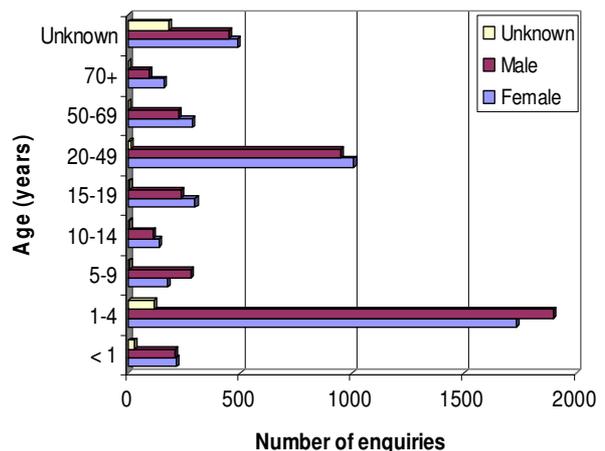
25.1% of calls between 8am-10pm were from the general public, but from 10pm to 8am members of the public made just 14.1% of the enquiries.

Human cases of poisoning

9330 enquiries concerned human cases of poisoning. 4664 (50.0%) of these were children under 10 years and males outnumbered females in this age group.

2744 (29.4%) enquiries were about adults (≥ 20 years) with a predominance of females in this age group.

93.4% of poisoning incidents occurred in the home or a domestic setting. A small proportion occurred at work (1.7%), in nursing/care homes (1.2%), hospitals (0.8%), public areas (0.6%) and other/unknown locations (2.4%).



More than half (59.6%) of the human cases were suspected accidental poisonings, 25.1% were intentional poisoning or recreational abuse, 12.2% were therapeutic errors and 3.2% had another or unknown intent.

Agents in human cases

Drugs (pharmaceuticals and drugs of abuse), industrial chemicals and household products were the main product groups involved in human cases. Drugs were most common in all age groups.

Paracetamol remains the most common drug: 1302 of the products ingested contained this drug. Ibuprofen was the next most common drug (454 products).

	0-9 years	10-19 years	≥20 years	Unknown	Total
Drugs	3206	1141	4440	890	9677
Industrial	1065	147	775	397	2384
Household	1367	84	273	235	1959
Plant/Fungi	234	38	77	71	420
Cosmetic	354	25	46	41	466
Agrochemical	94	3	87	74	258

Top drug enquiries in descending order of frequency (human cases only)

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	Flurazepam	Sertraline
Ibuprofen	Clavulanic Acid	Montelukast
Codeine*	Tramadol	Tripolidine
Diazepam	Mirtazapine	Risperidone
Zopiclone	Pseudoephedrine	Heroin
Alprazolam	Amitriptyline	Herbal Preparation
Amoxicillin/amoxycillin	Sodium valproate	Carbamazepine
Diclofenac	Olanzapine	Cetirizine
Aspirin	Mefenamic acid	Lithium
Escitalopram	Fluoxetine	Lamotrigine
Venlafaxine	Pregabalin	Metformin
Caffeine*	Mefenamic acid	Warfarin
Zolpidem	Chlorpromazine	Clonazepam
Quetiapine	Atorvastatin	Citalopram
Oral Contraceptive	Fluoxetine	Prednisolone
Multivitamins	Diphenhydramine	Calcium Carbonate
		Folic Acid

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

Household products

The most common household products were laundry products, particularly liquid detergent capsules, and cleaning products. The majority of enquiries about these products concerned children less than 10 years old.

Fabric cleaning/care product	Disinfectant/antiseptic/sanitiser
Cleaning products	Decorative/DIY/building product
Bleach	Toilet cleaner/freshener
Dishwasher product	Toy/Novelty
Automotive product	Air freshener

OUTCOME

361 (3.9%) human cases were followed-up. Most of these patients recovered completely but 24 suffered sequelae, 12 patients died, the outcome of 34 cases could not be determined and in 8 cases features were not related to poisoning. Pharmaceuticals were implicated in 9 fatal cases and agrochemicals/household products in three. One of these fatalities may not have been caused by poisoning (post mortem examination to be carried out); the others were all cases of deliberate self-poisoning or drug/substance abuse.

TOXBASE

TOXBASE is the on-line clinical toxicology database of the UK National Poisons Information Service and has been available to Irish hospital emergency departments and intensive care units since 2001. There are now 59 Irish users of TOXBASE, in addition to the NPIC, and these users accessed the database on 10,317 occasions in 2010. Hospital emergency departments were the main users (99.0% of sessions).

WEBSITE

The NPIC website, www.poisons.ie, was visited 9578 times during 2010, an average of 798 visits per month.

The section on low toxicity substances was the most popular (3406 visits). The news page, healthcare professionals sections, and the antidotes page were also popular.



OTHER ACTIVITIES

Toxicovigilance

In June 2010 the NPIC informed the HSE Department of Public Health of significant adverse effects associated with a recreational drug called Whack, which was being sold in headshops. The HSE subsequently issued a warning to the general public about the drug.

Between the 30th May and 16th June 2010 the centre was contacted about 49 patients who had suffered adverse effects after taking Whack. They presented with sympathomimetic features of tachycardia and hypertension, as well as agitation and severe psychotic reactions with delusions of parasitosis and hallucinations, persisting for up to 5 days. The Forensic Science Laboratory has since analysed this product and found it to contain two active ingredients. The first, fluorotropacocaine, is a drug of lower potency than the parent compound cocaine. The second compound was tentatively identified as desoxypradol (there is no current external reference standard so a best library match was used). This is an analogue of pipradol which is a central nervous system stimulant developed in the 1950s. It is likely that the severe, long-acting effects associated with Whack are due to this agent, as pipradol has been previously associated with psychotic reactions and insomnia.

Poison Prevention Leaflets

The Poison Prevention Leaflets were reviewed and updated during 2010. The new leaflet gives the telephone number for the pilot public poisons information line launched in January 2011. 80,000 new leaflets were printed using funding received from Beaumont Hospital Foundation. These leaflets can be ordered on-line, free of charge from the Health Promotion Department of the HSE (www.healthinfo.ie) or downloaded from the NPIC website (www.poisons.ie). The leaflet is also part of the Child Safety Awareness Pack that is provided to parents of young children during home visits by public health nurses.



The leaflet is titled "Poison Prevention Guidelines" and is divided into two main sections: "If you think your child has been poisoned" and "What should you do?".

If you think your child has been poisoned

DO NOT DELAY!
CALL
(01) 809 2166

Monday to Friday 9am - 5pm

Your call will be answered by a Specialist in Poisons Information. You will be advised if medical attention is needed.

Outside these hours, contact your GP or hospital. In case of emergency call 999 or 112.

Children's pharmacist advice 24/7
(01) 809 2166

POISONS
INFORMATION CENTRE OF IRELAND
Monday to Friday 9am - 5pm

If you think your child has been poisoned

Poison Prevention Guidelines

What should you do?

1. Stay calm but act quickly.
2. Take the poison away from your child.
3. If the poison was eaten, make the child spit it out, run your fingers around their mouth and flick out any remaining pieces.
4. Never make your child vomit.
5. If a chemical has splashed into the eyes, wash the eyes with tap water for 15 minutes.
6. Wash any skin that was in contact with the poison with soap and water.
7. Call the Poisons Information Centre (01) 809 2166 (9am - 5pm).
8. Always take the product container with you to the telephone or to the GP or hospital.

Be ready to answer the following questions

1. What was taken?
2. How much was taken?
3. What is the child's age and weight?
4. Does the child have symptoms?
5. Does the child have an existing medical problem?
6. What time did the poisoning occur?
7. Is there information on the container?
8. What is the product used for?

Signs and symptoms of poisoning

The signs and symptoms of poisoning can be delayed. Always seek advice!

POISONS
INFORMATION CENTRE OF IRELAND
Monday to Friday 9am - 5pm

If you think your child has been poisoned, call the Poisons Information Centre
(01) 809 2166

POISONS
INFORMATION CENTRE OF IRELAND
BEAUMONT HOSPITAL

Client satisfaction survey

During 2010 surveys were posted or e-mailed to members of the public who had contacted the NPIC for advice following suspected accidental poisoning and who did not need to attend an emergency department (ED) or their GP. The forms were anonymised and were only sent to members of the public who had agreed to participate in the survey. Non-responders were not contacted again.

256 completed surveys were returned. Most responders (67%) had been referred to the NPIC by a doctor or healthcare professional and a further 23% were referred by a friend or family member. Only 5.4% already knew about the NPIC, through work or health promotion literature. This low level of awareness is unsurprising since the NPIC has never actively promoted its service to the general public.

Most of those completing the survey were able to follow the advice given by the NPIC but two people subsequently sought advice elsewhere. 67 responders (23.8%) would have gone to an emergency department if they hadn't contacted the NPIC and a further 41 (14.6%) would have gone to their GP.

Product data

The Chemicals (Amendment) Act 2010 designated Beaumont Hospital as the competent authority for the purposes of Article 9(3) of Regulation (EC) no 648/2004 on Detergents and also Article 45 of Regulation (EC) No 1272/2008 on classification, labelling and packaging of chemical substances and mixtures (CLP Regulation). The task of providing product information to meet the needs of medical professionals has been assigned to the National Poisons Information Centre.

The European Commission is currently carrying out a review to assess the possibility of harmonising the information to be submitted to poisons centres and appointed bodies, including establishing a format for the submission of information by importers and downstream users. During 2010, the Director and Manager of the NPIC were active members of a European working group convened to develop harmonised guidelines for product information. They attended four meetings of the working group, participated in e-mail discussions about the guidelines, and attended a workshop convened by the European Commission on 24th November to present the draft guidelines to industry. There will be further work on the guidelines in 2011 and the Commission will complete its review by January 2012.

PUBLICATIONS

Papers

The availability of toxicological analyses for poisoned patients in Ireland.
Nicola Cassidy, John X. Herbert, Joseph A. Tracey
Clinical Toxicology (2010) 48, 373–379

Abstracts

The epidemiology of medication errors in Irish residential care facilities as reported to the National Poisons Information Centre.
Cassidy N, Lee SKK, Donegan CF, Tracey JA.
European Geriatric Medicine 2010; 1(1): 587-588.

Medication Errors in Older Adults: The Experience of the National Poisons Information Centre of Ireland.
Cassidy N, Lee SKK, Donegan CF, Tracey JA.
European Geriatric Medicine 2010; 1(1): 589.

Mercury Enquiries to a National Poisons Information Centre - Poisoning or Exposure?
O Connor F, Casey PB, Tracey JA.
Clinical Toxicology 2010; 48: 272.

Dioxin Contamination of Irish Meat in 2008.
Tracey JA, Evans R.
Clinical Toxicology 2010; 48: 257.

The Availability of Toxicological Analyses Relating to the Management of the Poisoned Patient in Ireland.
Cassidy N, Herbert JX, Tracey JA.
Clinical Toxicology 2010; 48: 250.

Letters

Whacked!
John X Herbert, Fred Daly, Joseph A Tracey.
BMJ on-line <http://www.bmj.com/content/341/bmj.c3564/reply>. Rapid response to “Second generation mephedrone: The confusing case of NRG-1.” BMJ 2010; 341:c3564.

PRESENTATIONS

P Casey gave a presentation on the work of the poisons centre at a Cosmetics Information Day organised by the Irish Medicines Board on 15 September, which was attended by 140 industry representatives.

J Herbert spoke about “Toxicological analysis for poisoned patients in Ireland” at the IEQAS (External Quality Assessment Organisation for Medical Laboratories) Annual Participants Conference – Ireland on 7 October.

Dr J Tracey gave a lecture on drugs of abuse at the Medical Toxicology Course organised by the University of Wales, Cardiff, in November.

E Donohoe gave a presentation on digoxin poisoning at the National Poisons Information Service CPD day in November.

COMMITTEES

The Director sits on the UK National Poisons Information Service Clinical Standards Group and Dr Tracey attended two meetings of this group in 2010. He is a member of the EAPCCT working group on harmonisation of product data. He is a Member of Council, College of Anaesthetists, and is currently Vice-President of the College.

Elaine Donohoe remains on the TOXBASE editing group which met three times in 2010. Patricia Casey is a member of the UKPID working group and the EAPCCT working group on harmonisation of product data.

CONTINUING PROFESSIONAL DEVELOPMENT

February	CPD day, Cardiff	Attended by N. English
May	EAPCCT Congress, Bordeaux	Attended by F O'Connor and Dr Tracey. Posters presented by F O'Connor, N. Cassidy and Dr Tracey.
October	IEQAS (External Quality Assessment Organisation for Medical Laboratories) Annual Participants Conference – Ireland.	J Herbert gave a presentation on toxicological analyses for poisoned patients.
November	Toxbase editing group meeting, Edinburgh	Attended by E. Donohoe
	CPD day, Edinburgh	Attended by E. Donohoe and Dr J Tracey. E Donohoe gave a presentation on digoxin poisoning.
	Medical Toxicology course, Cardiff	Attended by Dr J. Tracey who gave a lecture on drugs of abuse.
	Chemical Incidents Training Day, Dublin (organised by the Health Protection Agency)	Attended by J Herbert