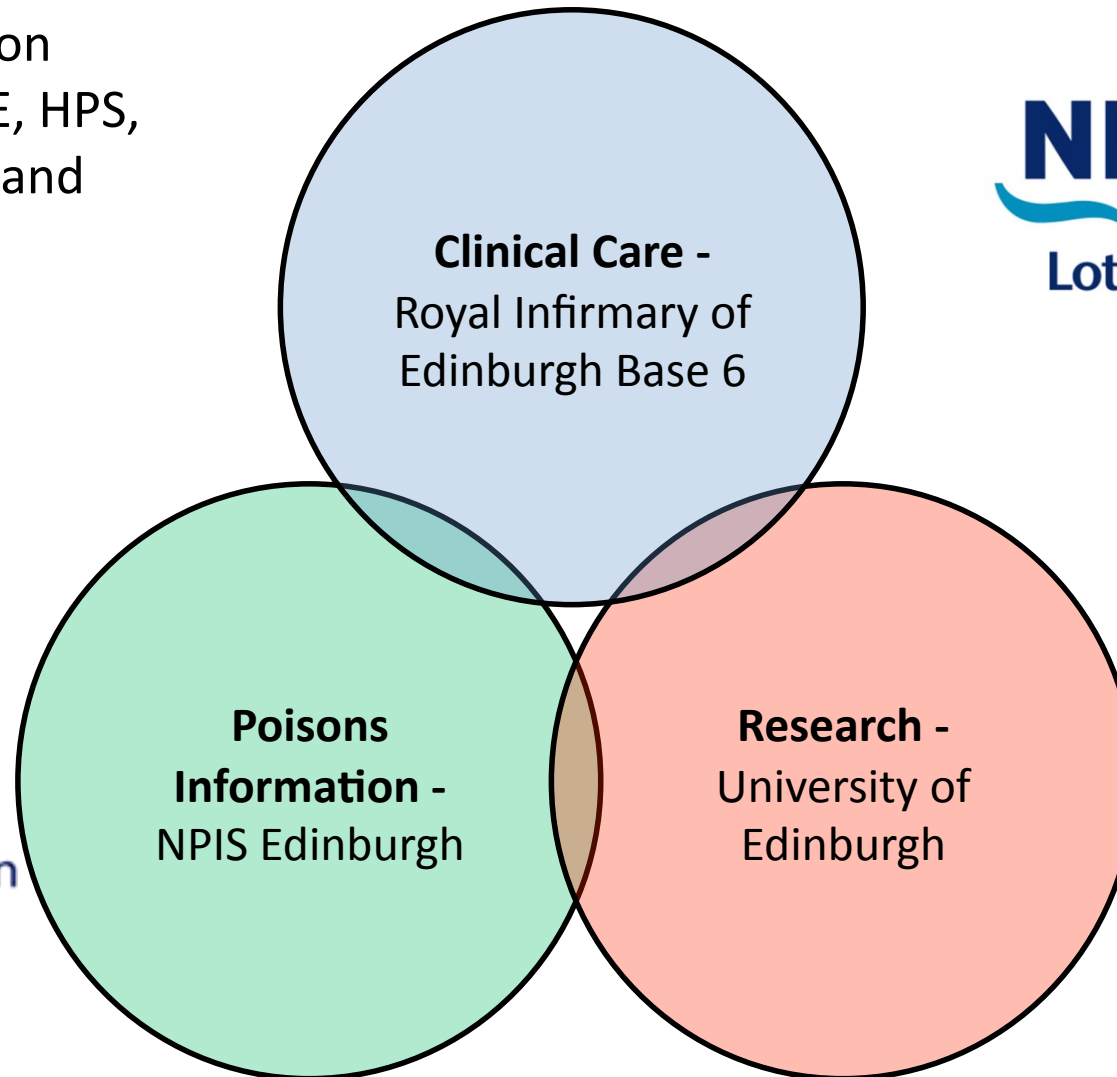


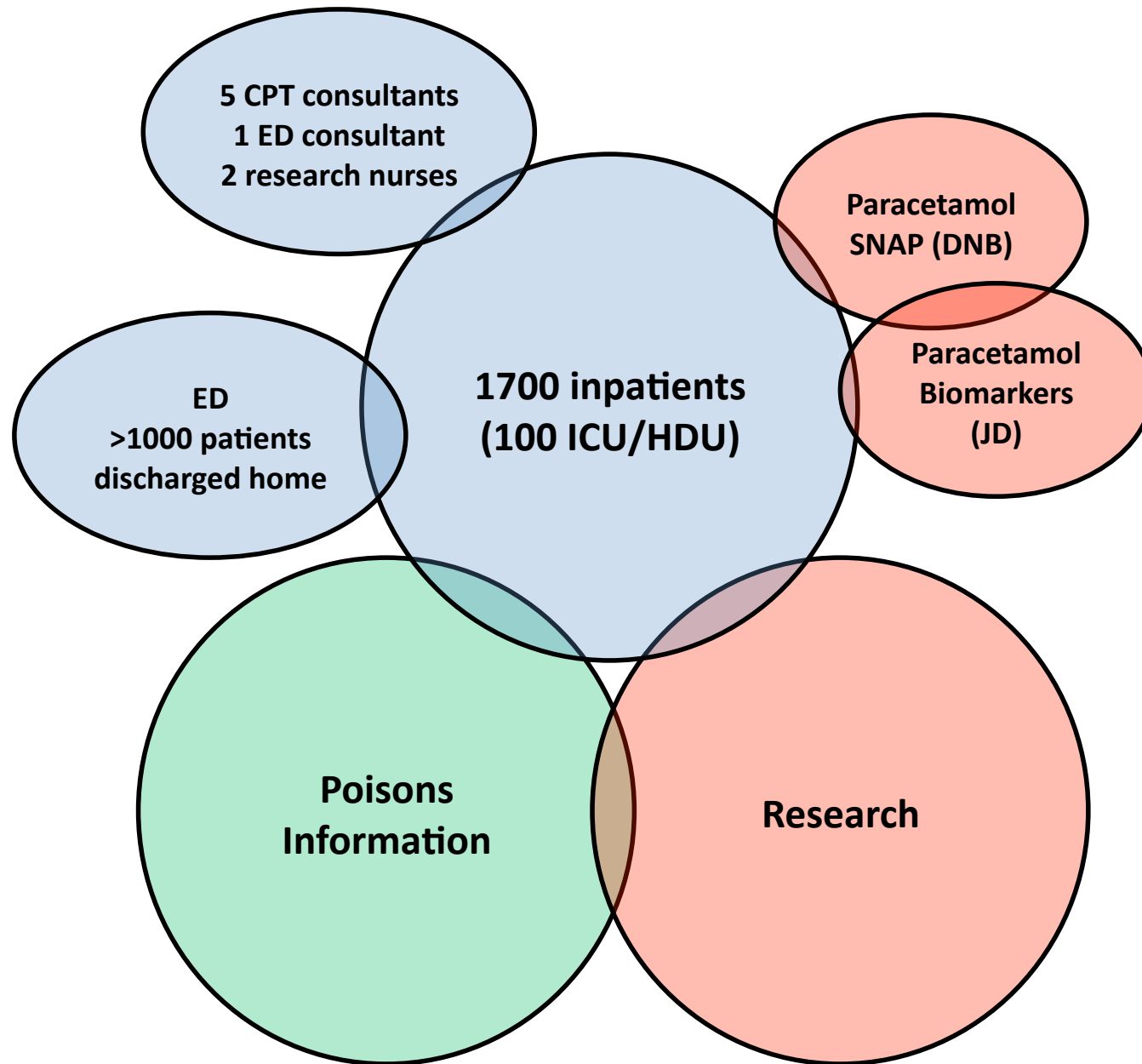
# Edinburgh Clinical Toxicology

A collaboration  
between PHE, HPS,  
NHS Lothian and  
University of  
Edinburgh



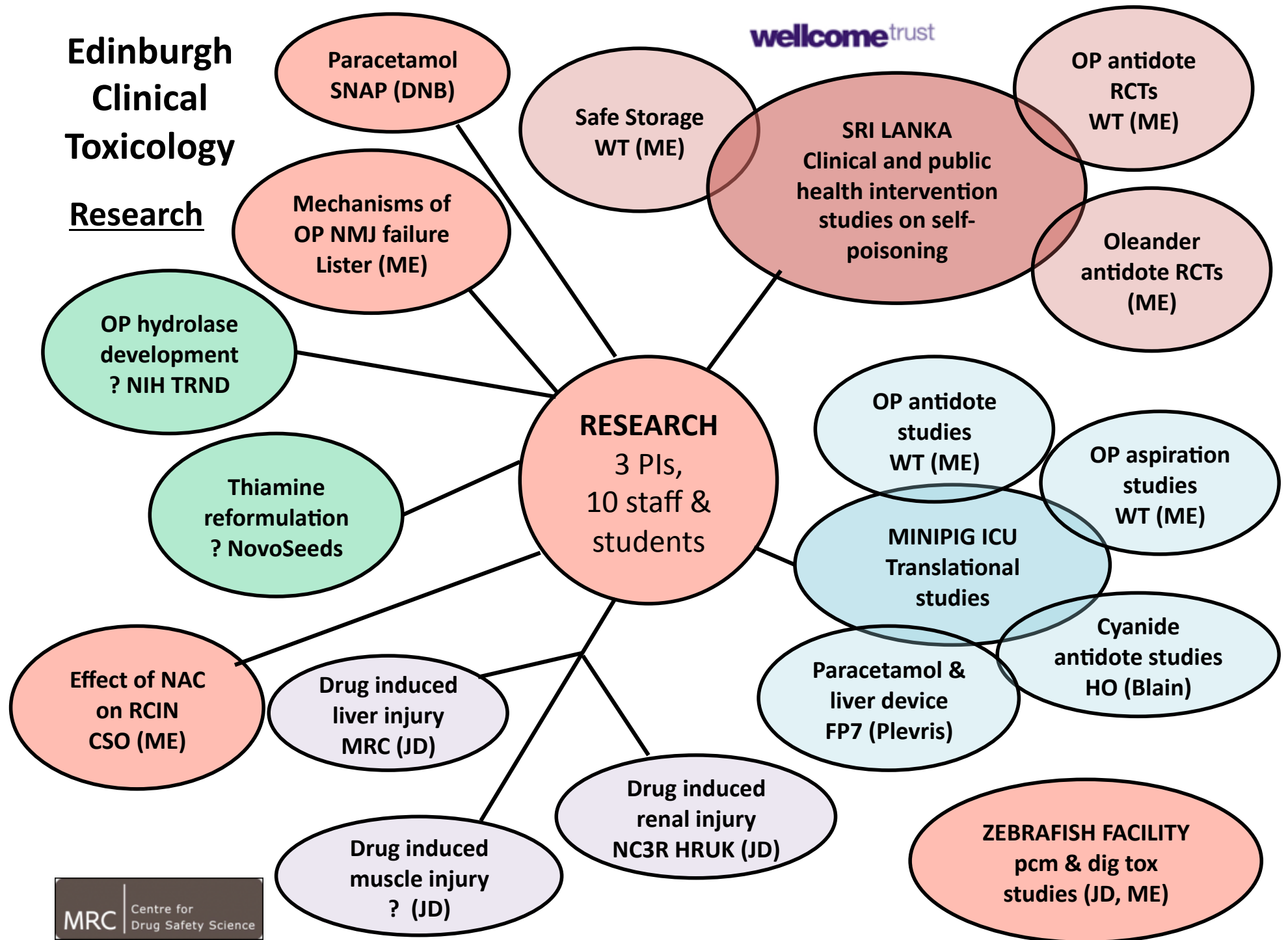
# Edinburgh Clinical Toxicology

## Clinical Care



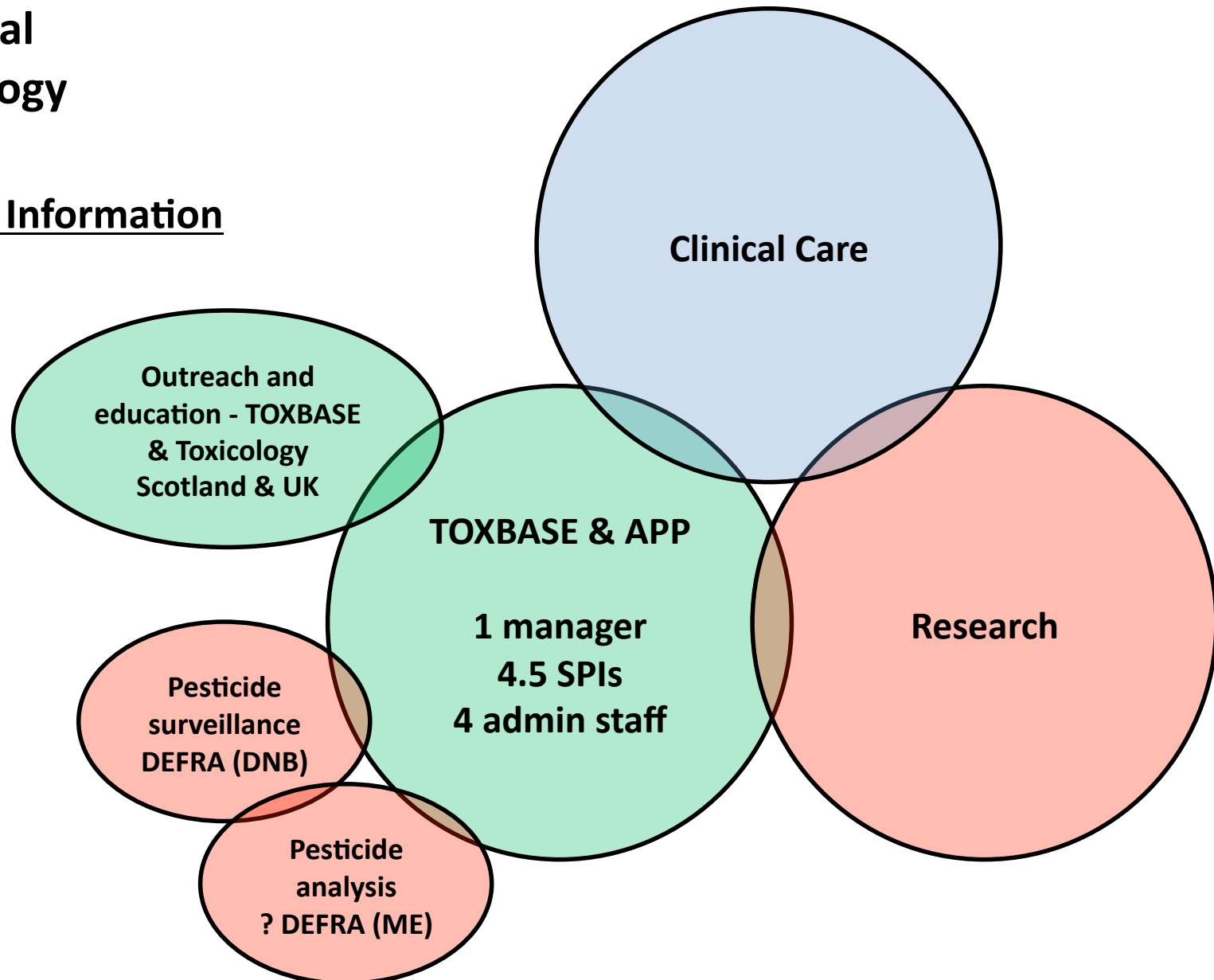
# Edinburgh Clinical Toxicology

## Research



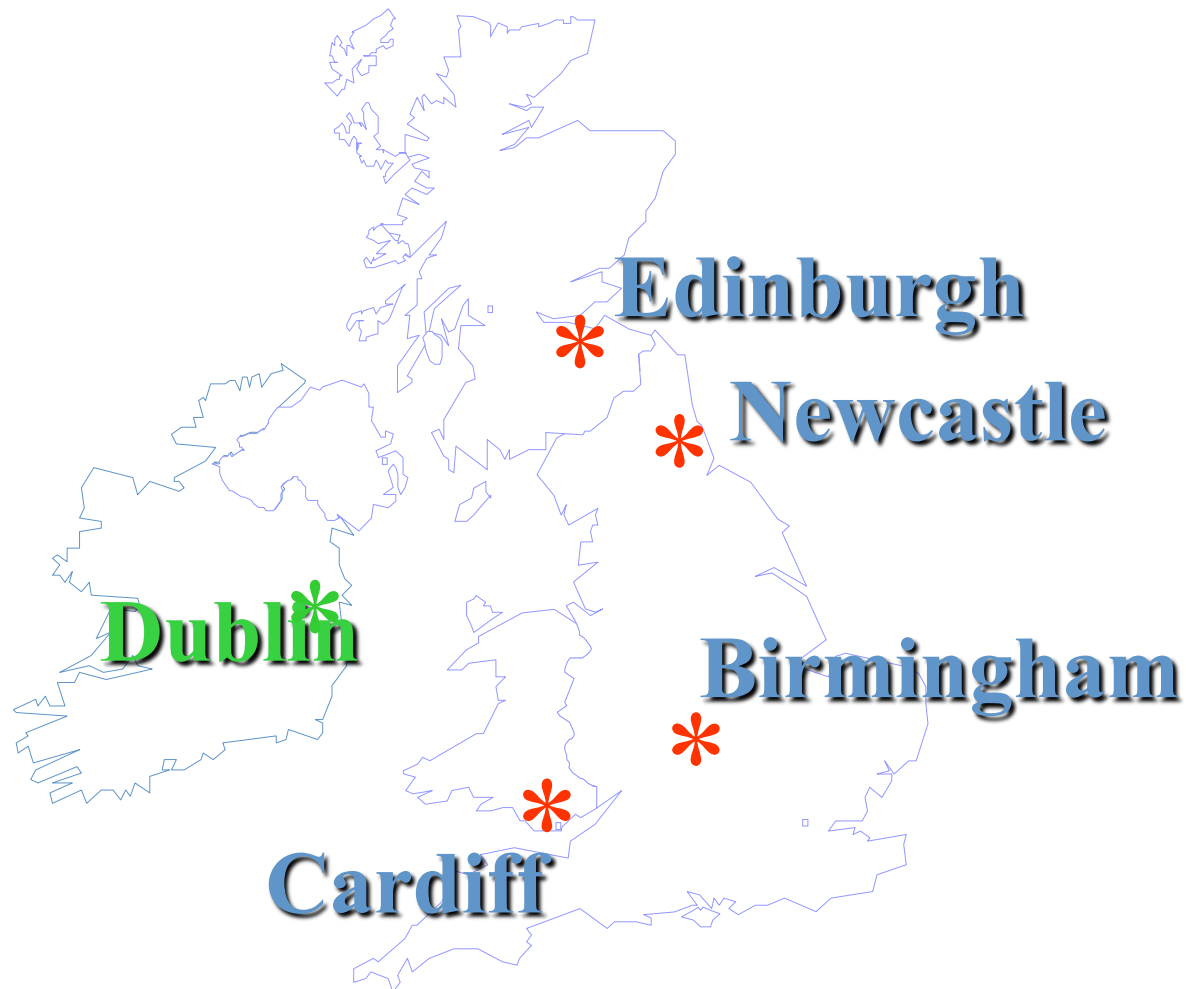
# Edinburgh Clinical Toxicology

## Poisons Information



# NATIONAL POISONS INFORMATION SERVICE

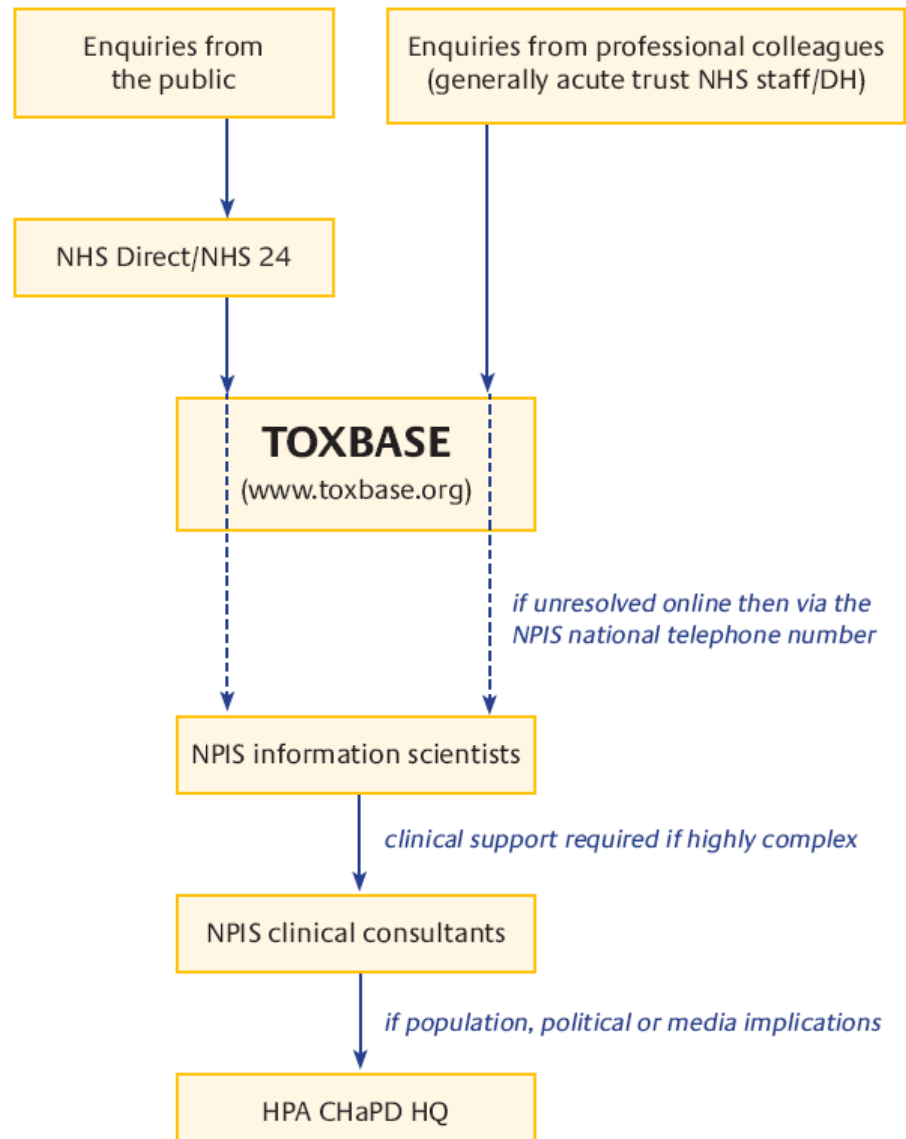
**Tel 0844 892 0111**



# Information provision

- Information on management of poisoning is provided to health care professionals
  - (a) directly to registered health care facilities directly via the Internet database **TOXBASE**, or
  - (b) via the telephone advice service: 0844 892 0111
    - more complex cases
    - where internet is not available to the enquirer
- Advice from a consultant clinical toxicologist is always available when necessary ( 4/16 SLOTS from Edinburgh)

## How poisons enquiries are answered



# **Working profile of NPIS**

## **Modes of information provision**

- **Internet system TOXBASE (>550,000 accesses/annum to >1.3 million entries)**
- **Telephone information service (50,000 / annum)**
- **NPIS consultant clinical toxicology referrals (~1,500 / annum)**
- **Health Protection Agency funding jointly with NHS for consultant staff**



# **NPIS-E Staff**

- **Specialists in poisons information (5 core)**
  - **graduate scientists (biomedical scientists, nurses, pharmacists) with additional training**
- **Clinical toxicologists (5; 4 with NPIS sessions)**
  - **medically qualified staff with additional expertise in clinical toxicology and poisoning**
  - **consultant medical staff in each NPIS unit**
  - **specialist registrars may be attached**
- **A&C and IT Staff (3)**



UK NPIS 0844 892 0111  
Ireland NPIC (01) 809 2566  
[mail@toxbase.org](mailto:mail@toxbase.org)



A service commissioned by the Health Protection Agency

## Welcome to TOXBASE®

The primary clinical toxicology database of the National Poisons Information Service

### Login

If you are already registered with TOXBASE please sign in:  
Password and username are case sensitive.

☐ Remember this computer

Not registered yet? [Register now!](#)

### TOXBASE® is for health professionals only.

For members of the public contact:

In England and Wales (NHS Direct): **0845 4647**  
In Scotland (NHS 24): **08454 242424**

### Troubleshooting

If you have had difficulty in getting through to the NPIS by telephone then we will generally be aware of this and are trying to get the problem fixed. TOXBASE® should provide most of the information you require.

If you are having computer problems try clicking on the REFRESH button on your browser. If you are unable to access TOXBASE® try the backup site on [www.TOXBASEbackup.org](http://www.TOXBASEbackup.org) Please save this alternative address in your "favourites" or desktop.

If you are having persistent problems contact your IT department or call **0131 242 1381/1383** during office hours or e-mail [mail@toxbase.org](mailto:mail@toxbase.org)

Updated 21 April 2011

### NPIS Services

[About the NPIS](#)  
[TOXBASE®](#)  
[Telephone enquiries to the NPIS](#)  
[Laboratory tests and antidotes](#)  
[Poisoning statistics](#)

The information on TOXBASE® is designed for healthcare professionals and may require expert clinical interpretation in complex cases. In this event you should discuss your case with your poisons service:

In the UK: NPIS **0844 892 0111**  
In Ireland: NPIC **(01) 809 2566**

Information provided by users during telephone enquiries to NPIS or from TOXBASE® questionnaires is shared between units for the purposes of managing individual patient episodes and for routine surveillance purposes.

Callers/TOXBASE® users are informed that they should be aware that information that they provide may be seen by other NPIS units and used in this way.



**TOXBASE user on Viewdata**



UK NPIS 0844 892 0111  
Ireland NPIC (01) 809 2566  
[mail@toxbase.org](mailto:mail@toxbase.org)

#### Search

[Advanced Search](#) | [Need help searching](#)



A service commissioned by the Health Protection Agency

[News](#) [General Info](#) [Specialist areas](#) [Chemicals](#) [Poisons Index A-Z](#) [Dosage Calculator](#)

Scheduled TOXBASE maintenance [More information here](#)

## Welcome to TOXBASE®

### The primary clinical toxicology database of the National Poisons Information Service

Every effort has been made to ensure that this database is accurate and up-to-date. However it cannot cover every eventuality and the information providers cannot be held responsible for any adverse effects of the measures recommended.

The information on TOXBASE® is designed for healthcare professionals and may require expert clinical interpretation in complex cases. In this event you should discuss the case with your poisons service: in the UK NPIS 0844 892 0111, in Ireland NPIC (01) 809 2566.

## Newsflashes

**13/4/2011**

19 and 20 April 2011

On Wednesday 20 April the main TOXBASE site will be unavailable from 10.00 AM for approximately 2 hours. Users should be forwarded to the backup site automatically.

In addition, on Tuesday 19 April the backup site will be unavailable from 10.00 AM for approximately 2 hours. The main TOXBASE site will be unaffected.

Poisons information will, of course, remain available by contacting your local poisons information service: in the UK NPIS 0844 892 0111, in Ireland NPIC (01) 809 2566.

We apologise in advance for any problems.

**28/3/2011**

Cases of seriously ill patients after taking potentially contaminated heroin have been reported in the Bournemouth and Poole area. [Click here for further information](#)

Health professionals concerned about individual patients should discuss with their local poisons information service: in the UK NPIS 0844 892 0111 in Ireland NPIC (01) 809 2566

Updated 21 April 2011

### NPIS Services

[About the NPIS](#)

[TOXBASE®](#)

[Telephone enquiries to the NPIS](#)

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UK NPIS 0844 892 0111  
Ireland NPIC (01) 809 2566  
[mailto: mail@toxbase.org](mailto:mail@toxbase.org)

## Search

For help with searching [click here](#)



National Poisons  
Information Service



A service commissioned by the Health Protection  
Agency

[News](#) [General Info](#) [Specialist areas](#) [Chemicals](#) [Poisons Index A-Z](#) [Dosage Calculator](#)

Amitriptyline

Updated 8/2006\*

[Printable version](#)

### Type of Product

Tricyclic antidepressant. Used primarily for the treatment of depression. Other uses include treatment of neuropathic pain and nocturnal enuresis in children.

### Ingredients

#### Amitriptyline

Tablets - 10 mg, 25 mg, 50 mg

Mixture - 10 mg/5 mL, 25 mg/5mL

### Toxicity

Tricyclic antidepressants are very toxic by ingestion. Normally ingestion of 15 mg/kg would be expected to result in serious, potentially life-threatening symptoms. Children who have ingested <5 mg/kg developed no or minor effects (Rosenbaum 2005; Mc Fee 2001; Spiller 2003). Fatalities have occurred at doses >15 mg/kg.

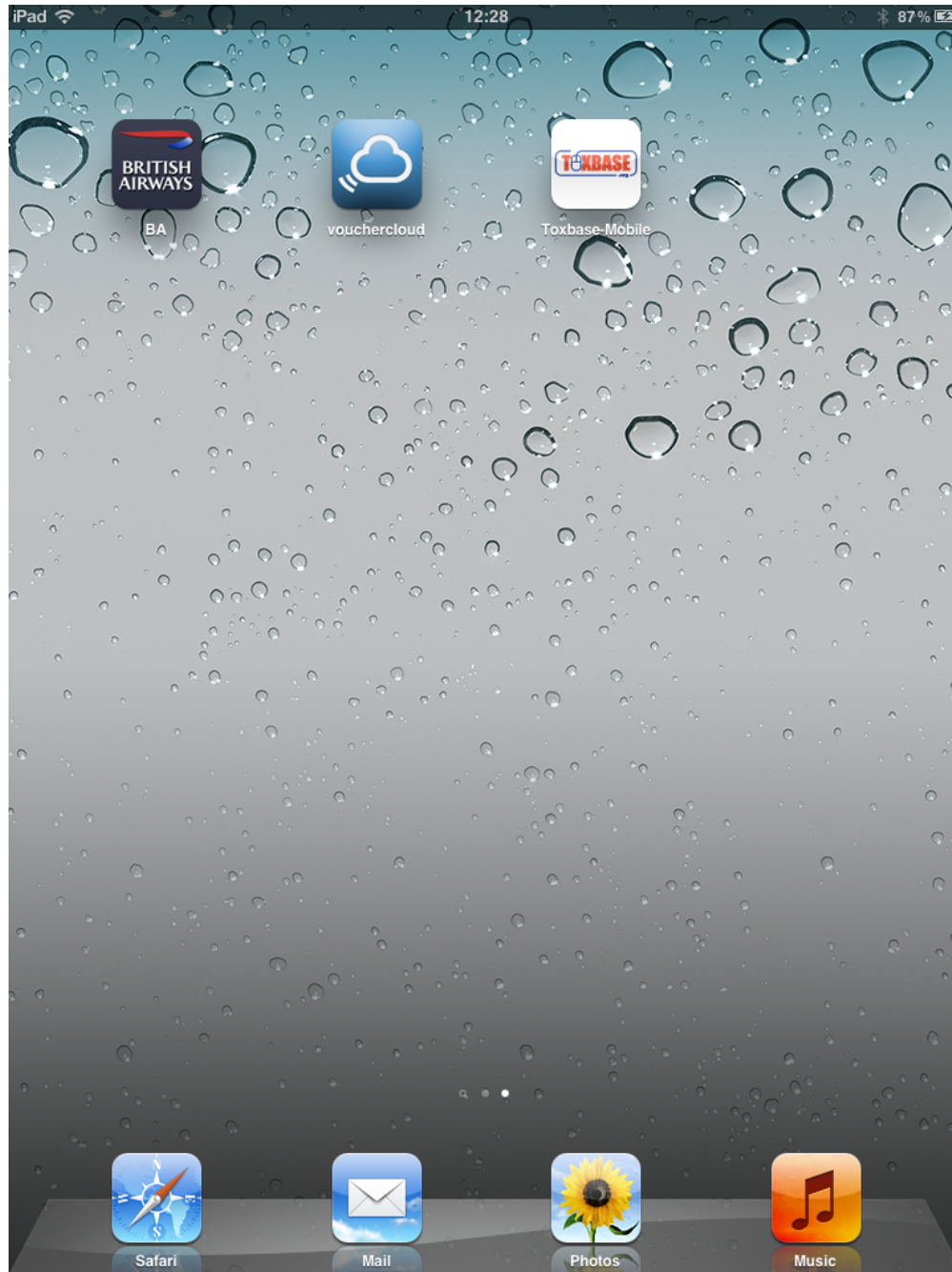
#### NHS Direct / NHS 24 / Primary Care

Children < 6 years should be assessed by a physician following ingestion of any amount.

Children > 6 years or older and adults who are symptomatic OR who have ingested >5 mg/kg of tricyclic antidepressant should be reviewed by a physician.

Children > 6 years or older who have accidentally ingested < 5 mg/kg AND have no symptoms do not need referral to hospital if adequate supervision at home is available.





## TOXBASE APP

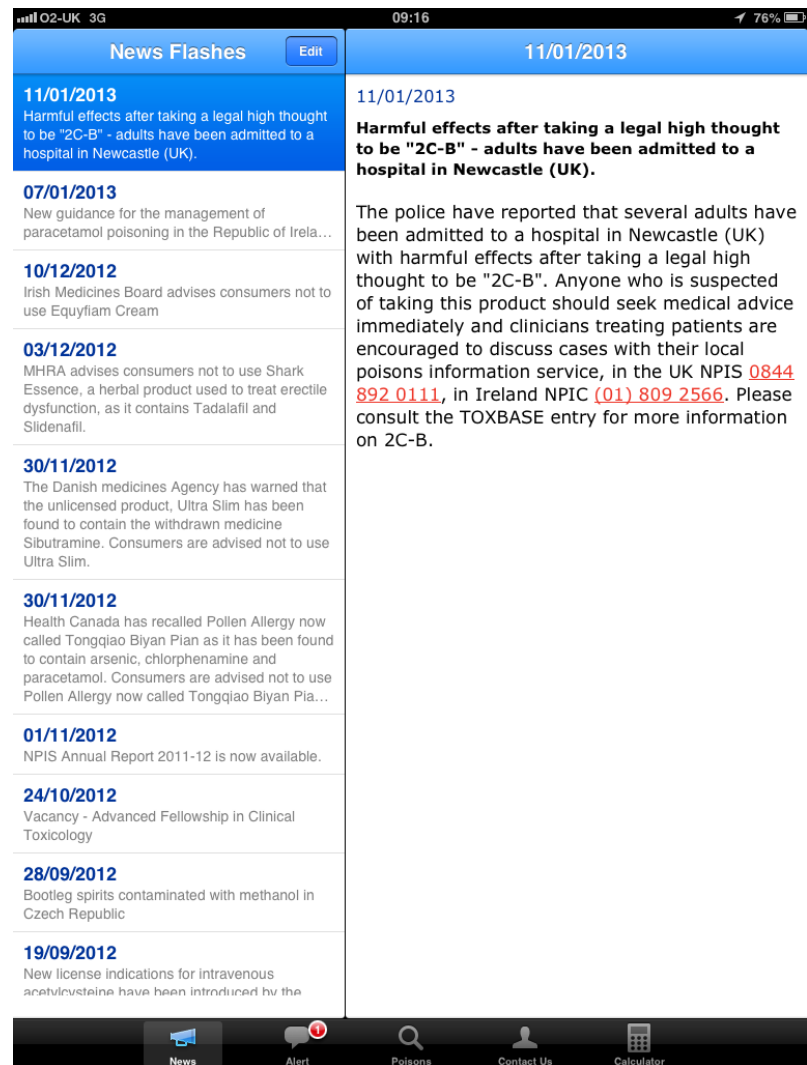
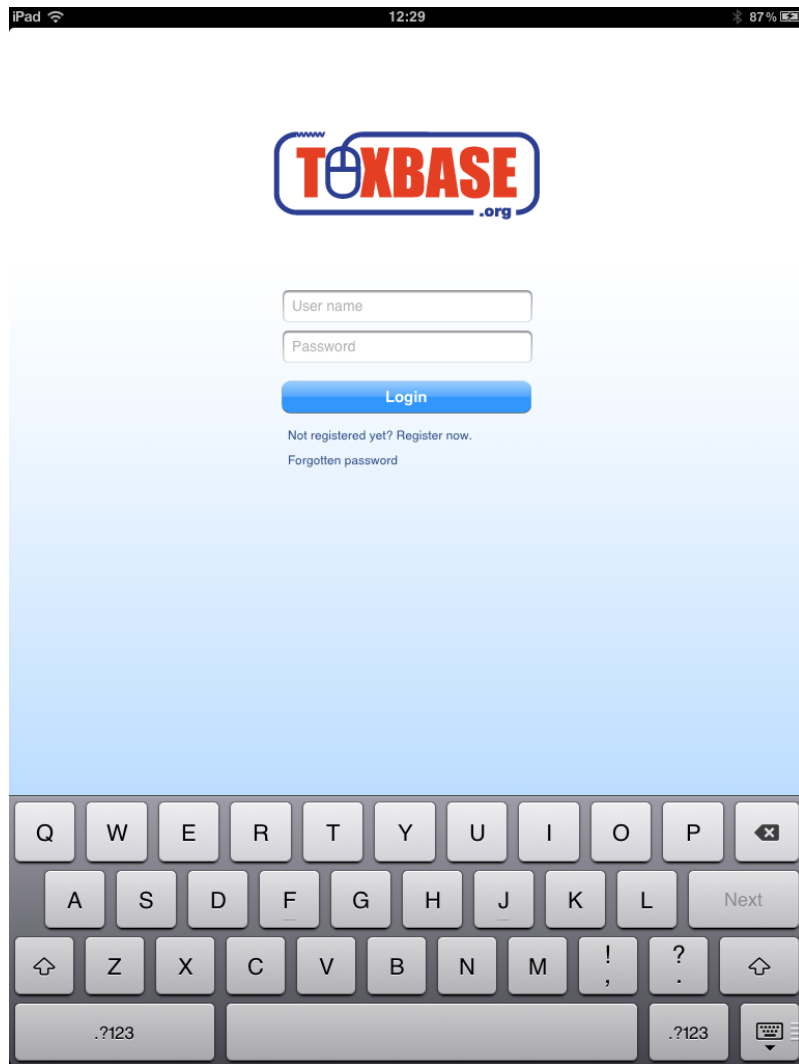
New product (Oct 2012)

Available off-line

Costs £6.99 per year

Full database (17000 entries) for NHS staff  
Limited database for others

iPhone & iPad done  
Android soon ....



iPad 12:26 87%

Poison Search

4mma

4MMA

**Type of Product**

Synthetic ring-methoxylated methamphetamine derivative. Structurally and pharmacologically similar to MDMA.

**Synonyms**

PMMA, N-methyl-1-(4-methoxyphenyl)-2-aminopropane, 4-methoxy-n-methyl-amphetamine [4MMA]

**Ingredients**

**Paramethoxymethamphetamine**

Sometimes contained in 'ecstasy' tablets with other chemicals, particularly PMA (notably those with "Mitsubishi", "E" or "Jumbo" logos).

**Toxicity**

More than 15 cases of death with PMMA detected are reported in the world literature. In almost all cases other substances have also been detected, particularly PMA. There are unpublished reports of a total of 16 deaths in the last 12 months in Norway due primarily to PMMA (EMCDDA, 2003) and detection of PMMA in samples acquired in Scotland in 2011. NPIS is aware of unpublished international reports of significant out of hospital mortality in users of this agent.

**Animal data:** PMMA causes release of serotonin in the CNS and is also likely to act as a monoamine oxidase A enzyme inhibitor (EMCDDA, 2003). It has CNS locomotor stimulant (Palenicek et al, 2011) (although less so than MDMA, cocaine or

Q W E R T Y U I O P  
A S D F G H J K L  
Z X C V B N M  
123 123

02-UK 3G 09:17 75%

Search

Chlorine

[Features of poisoning](#)

[Management of poisoned patients](#)

[Mechanisms of toxicity](#)

[Information on incidents/cases involving deliberate/accidental release](#)

**Mechanisms of toxicity**

The mechanisms of tissue damage are poorly understood and the predominant anatomic site of injury may vary, depending on the chemical species produced. Because of its intermediate water solubility and deeper penetration, elemental chlorine frequently causes acute damage throughout the respiratory tract.

Cellular injury is believed to result from the oxidation of functional groups in cell components, from reactions with tissue water to form hypochlorous and hydrochloric acid, and from the generation of free oxygen radicals.

**Workplace Exposure Limits**

UK Short Term Exposure Limit (15 minute reference period): 0.5 ppm (1.5 mg/m<sup>3</sup>).

ALERT BOX

All those exposed to this chemical should be referred for medical assessment.

If this exposure has occurred at work or in a public space consider the implications for others exposed.

Primary responders and secondary carers must consider wearing personal protective equipment (PPE).

Treating clinicians should usually discuss all cases with their local poisons information service:

in the UK NPIS **0844 892 0111**, in Ireland NPIC **(01) 809 2566**.

**Features**

[Features following inhalation](#)

[Features following skin contact](#)

[Features following eye contact](#)

**Inhalation**

Irritation of eyes and nose with sore throat, cough, chest tightness, headache, fever, wheeze, tachycardia and confusion. Chemical pneumonitis, tachypnoea, dyspnoea and stridor due to laryngeal oedema may follow. Pulmonary oedema with increasing breathlessness, wheeze, hypoxia and cyanosis may take up to 36 hours to develop.

News

Alert

Poisons

Contact Us

Calculator



# National Poisons Information Service

Annual Report 2009/2010 and Five Year Review



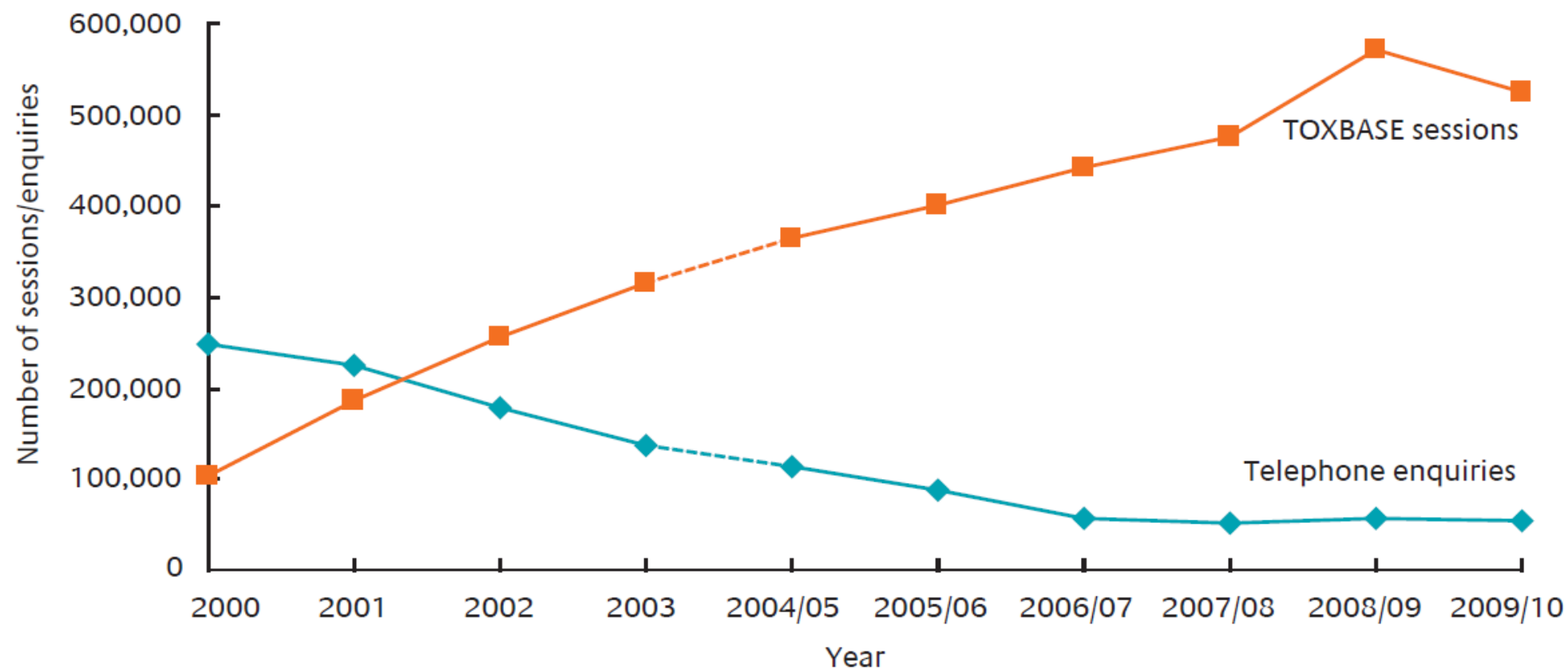


FIGURE 3.1 Telephone enquiries and TOXBASE sessions from 2000 to 2009/10 (data for 2000–2003 by calendar year; subsequent years by financial year)

TABLE 3.4 Pharmaceutical agents: top TOXBASE accesses by UK, Republic of Ireland and overseas users in 2009/10

Rank	UK		Republic of Ireland		Overseas	
	Agent	Number of accesses (% of total)	Agent	Number of accesses (% of total)	Agent	Number of accesses (% of total)
1	Paracetamol*	71,652 (6.3%)	Paracetamol*	1,810 (6.6%)	Paracetamol*	615 (3.6%)
2	Ibuprofen	42,726 (3.7%)	Ibuprofen	888 (3.2%)	Ibuprofen	325 (1.9%)
3	Codeine†	25,573 (2.2%)	Codeine†	731 (2.7%)	Quetiapine	273 (1.6%)
4	Salicylates‡	25,452 (2.2%)	Diazepam	690 (2.5%)	Carbamazepine	268 (1.6%)
5	Citalopram	22,483 (2%)	Salicylates‡	619 (2.3%)	Amitriptyline	263 (1.5%)
6	Diazepam	20,646 (1.8%)	Zopiclone	604 (2.2%)	Salicylates‡	242 (1.4%)
7	Fluoxetine	18,227 (1.6%)	Escitalopram	520 (1.9%)	Sertraline	212 (1.2%)
8	Zopiclone	17,092 (1.5%)	Venlafaxine	509 (1.9%)	Venlafaxine	212 (1.2%)
9	Tramadol	12,435 (1%)	Alprazolam	440 (1.6%)	Diazepam	208 (1.2%)
10	Amitriptyline	11,837 (1%)	Quetiapine	374 (1.4%)	Fluoxetine	208 (1.2%)

\* Excludes compound analgesics containing paracetamol and codeine

† Includes all codeine-containing products

‡ Includes aspirin

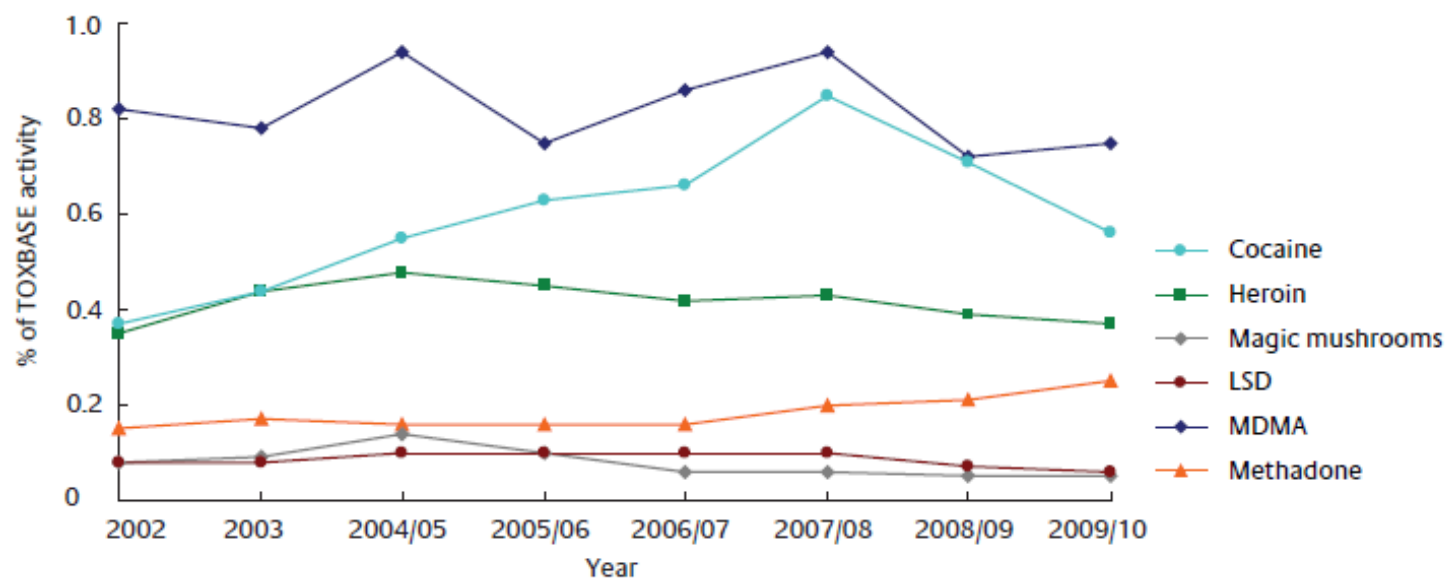


FIGURE 4.6 TOXBASE sessions relating to selected Class A drugs of misuse (data for 2002–2003 by calendar year; subsequent data by financial year)

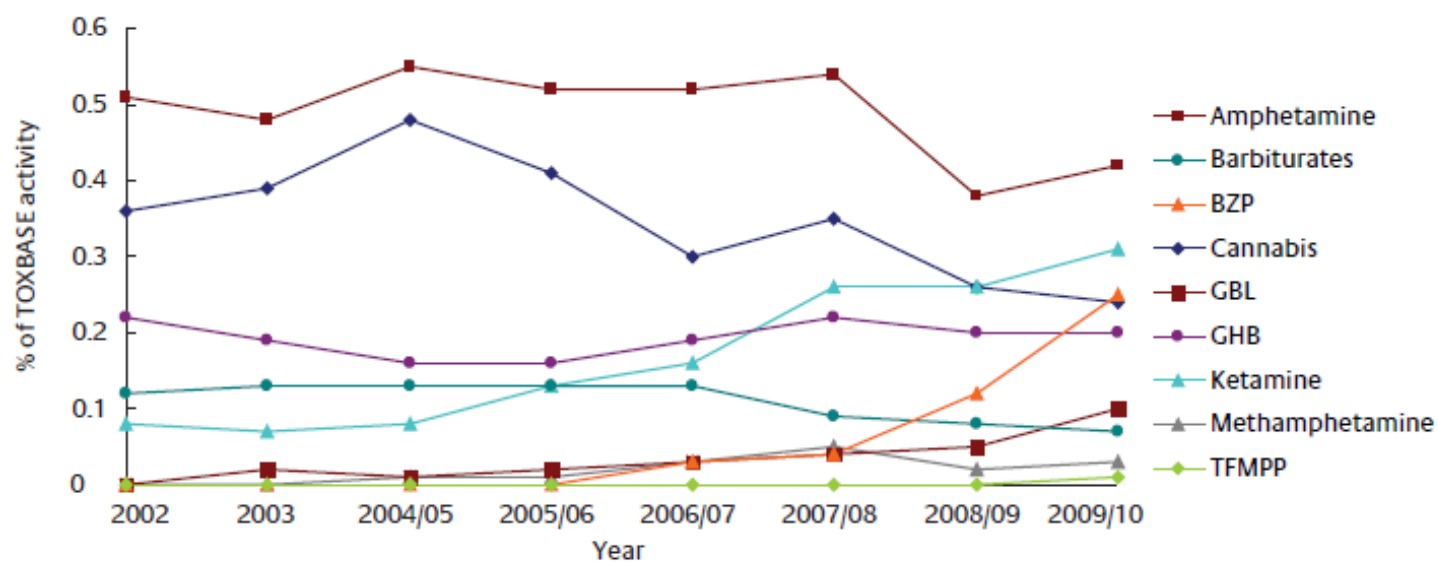
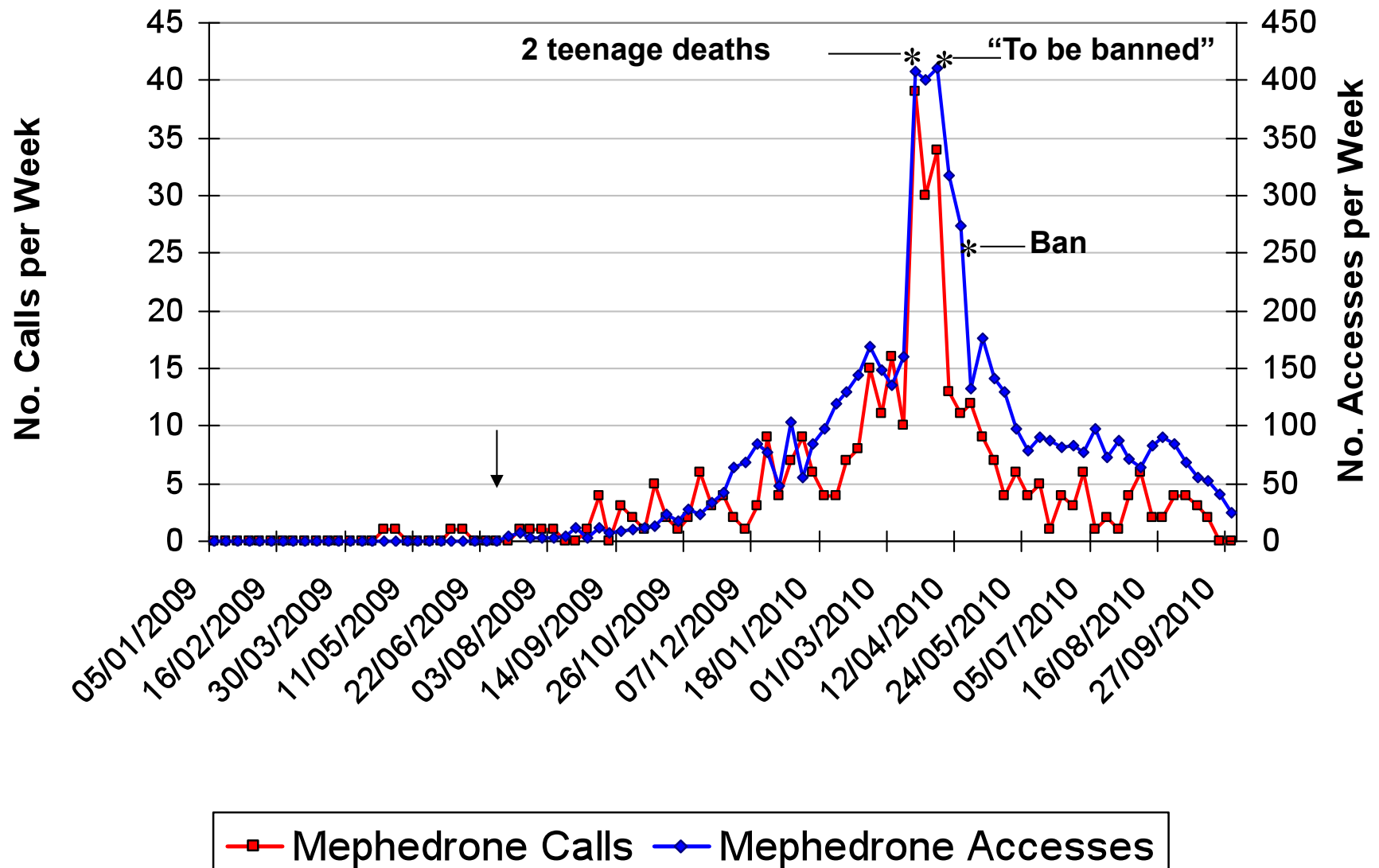


FIGURE 4.7 TOXBASE sessions relating to selected drugs of misuse other than Class A drugs (data for 2002–2003 by calendar year; subsequent data by financial year)

## Mephedrone calls and accesses



## Possible replacement legal highs

### Naphyrone

- Naphthylpyrovalerone, AKA NRG-1, energy-1



### Ivory Wave (“Bath salts”)

- Reportedly MDPV, but actually found to contain desoxypipradol
- Similar to Irish headshop product “Whack”

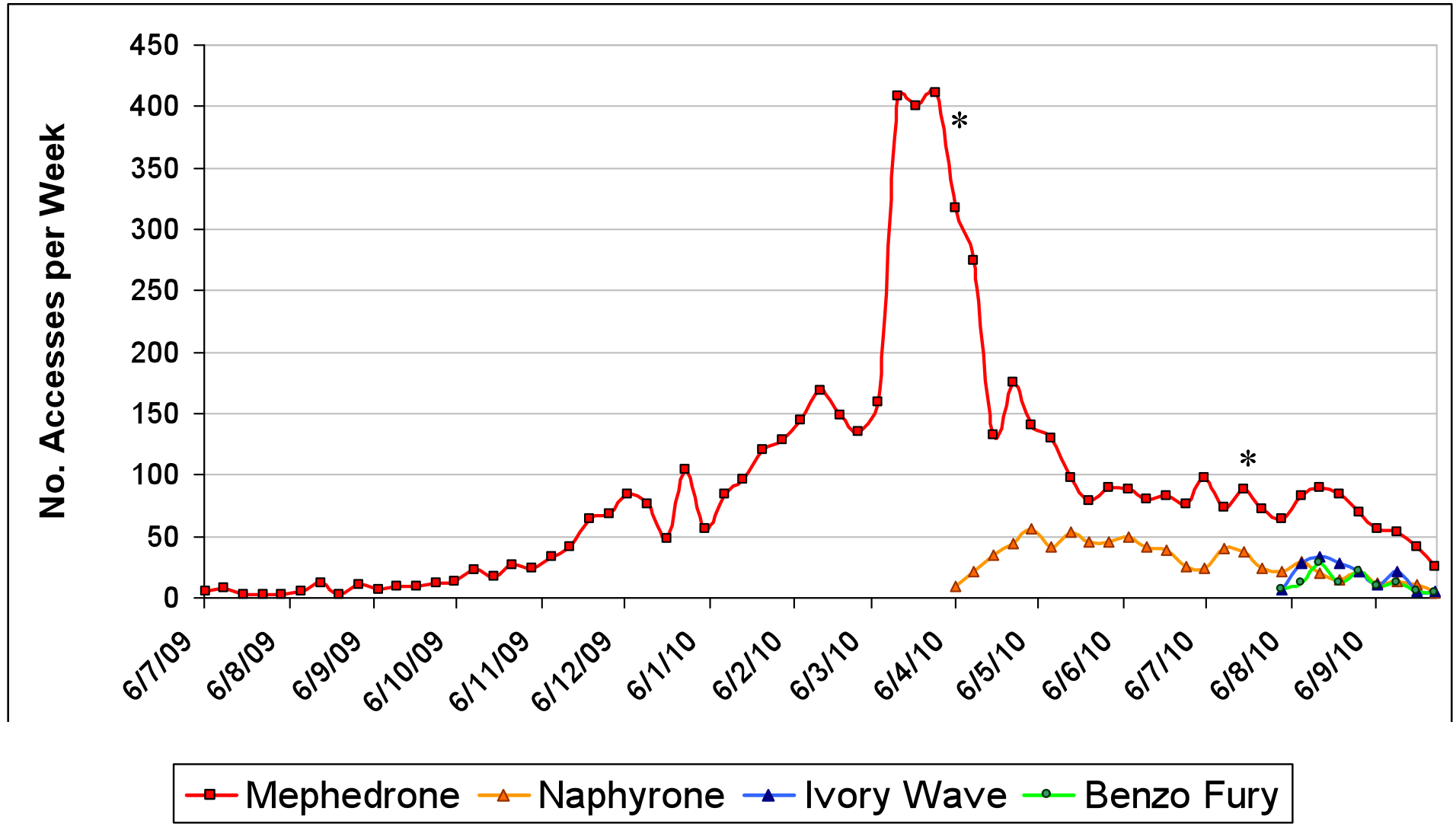


### Benzo Fury

- Reportedly 6-APB (analogue of methylenedioxyamphetamine)



## Toxbase accesses for Legal Highs

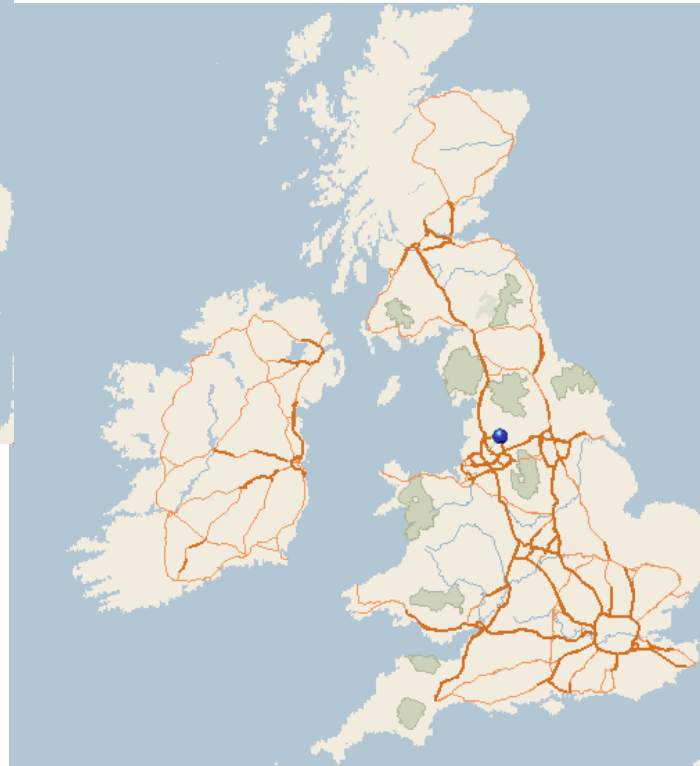


# Naphyrone

**First call 13/4/2010**  
Bolton (BL6 6PQ)

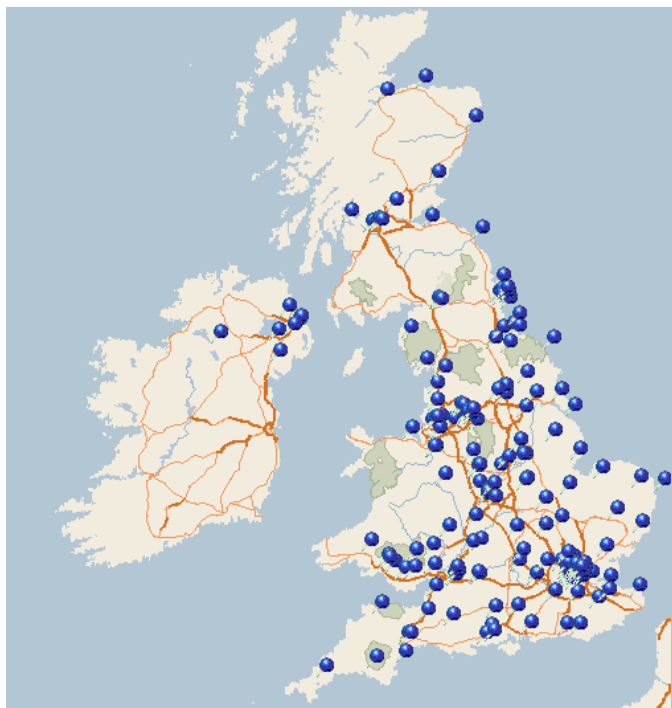
**TOXBASE entry**  
8/4/2010

**First access 8/4/2010**  
Barrow-in-Furness  
(LA14 4LF)





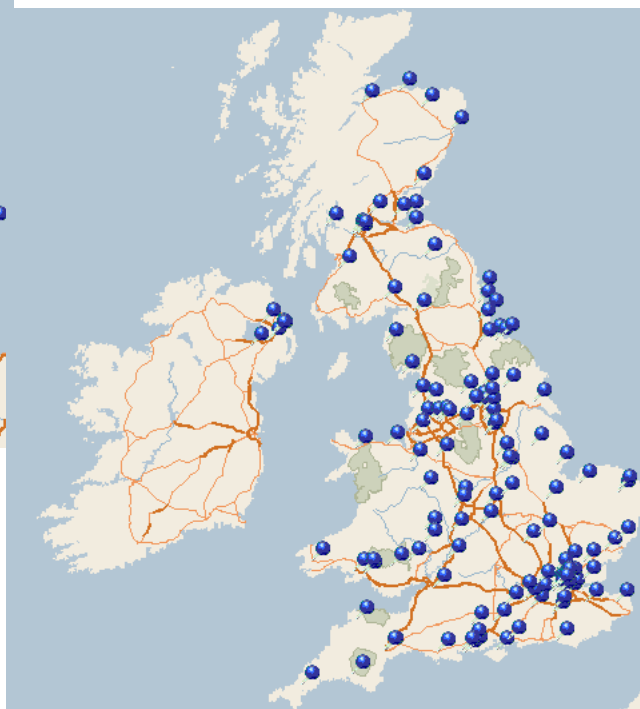
Apr to Jun 2010



## Naphyrone

Jul to Sep 2010

**Naphyrone made illegal 23<sup>rd</sup> July 2010**



Oct to Dec 2010

