

Cynulliad Cenedlaethol Cymru  
[Y Pwyllgor Iechyd a Gofal Cymdeithasol](#)  
[Ymchwiliad i sylweddau seicoweithredol](#)  
[newydd \("cyffuriau penfeddwol](#)  
[cyfreithlon"\)](#)

Tystiolaeth gan Heddlu Gogledd Cymru -  
LH 12

# TICTAC<sup>®</sup>

## Visual Drug Identification

A comprehensive database for the identification of  
drugs

Produced by TICTAC Communications at  
St. George's University of London Medical School

# TICTAC

TICTAC collects and analyses legal & illegal drugs to compile a database for the visual identification of solid dose drugs





# What is TICTAC?

A comprehensive and trusted software & database system for:

1. The instant visual identification of solid dose drugs.
2. Information, reference and training material on drugs and drugs abuse.
3. Insight into new and emerging drugs

# Which forces/labs use TICTAC ?

- ❖ Avon & Somerset \*
- ❖ Bedfordshire\*
- ❖ Cambridgeshire \*
- ❖ Cheshire
- ❖ City Of London \*
- ❖ Cleveland\*
- ❖ Derbyshire
- ❖ Devon & Cornwall \*
- ❖ Dorset \*
- ❖ Essex
- ❖ Europol
- ❖ Garda
- ❖ Gloucester\*
- ❖ Grampian
- ❖ Greater Manchester
- ❖ Gwent \*
- ❖ Guernsey Police
- ❖ Hampshire \*
- ❖ Hertfordshire
- ❖ Home Office
- ❖ Kent\*
- ❖ Lancashire
- ❖ Leicestershire
- ❖ Lothian & Borders
- ❖ Norfolk \*
- ❖ North Wales\*
- ❖ Metropolitan Police
- ❖ Nottinghamshire\*
- ❖ Royal Navy (Provost Marshal)
- ❖ SCDEA
- ❖ SOCA
- ❖ South Wales
- ❖ Strathclyde
- ❖ Suffolk \*
- ❖ Surrey \*
- ❖ Sussex \*
- ❖ Staffordshire
- ❖ Tayside
- ❖ Thames Valley \*
- ❖ West Mercia\*
- ❖ West Yorkshire
- ❖ Environments Scientifics Group
- ❖ Forensic Science Service NI
- ❖ Guernsey Public Analysts
- ❖ Guernsey Customs & Immigration
- ❖ Key Forensic Services
- ❖ LGC Forensics
- ❖ Mass Spec Analytical
- ❖ Reading Scientifics

# Three Versions that compliment each other

## TICTAC Pro

- Original version
- Will run on single computers or networks
- Requires training

TICTAC Pro desktop application interface showing various search and identification fields.

TICTAC Pro desktop application showing a full record for a specific drug, including images and detailed information.

## TICTAC Net

- Runs on Force Intranets
- Simplified interface
- Force-wide access
- Requires No training

TICTAC Net web application interface showing search options for identifying drugs.

## TICTAC Mobile

- For mobile/Smart phones
- Similar to TICTAC net

TICTAC Mobile application interface showing search options for identifying drugs on a mobile device.



# Who uses TICTAC?

## Law & Order

- UK Police (civil, military)
- Police overseas
- Home Office
- Prisons
- Customs
- Forensic laboratories

## Industry

- Pharmaceutical Industry
  - New product development
  - Market intelligence
  - Rogue tablets
- Food Industry

## Health

- Drug treatment & support organisations
- Medicines & Healthcare Products Regulatory Agency (MHRA)
- Healthcare Protection Agency (HPA)
- Community pharmacies
- Primary Care Trusts (PCT)
- Nursing/care homes
- Hospitals & pharmacies
  - Patient admissions
  - Mixed batches of tablets
  - Generic prescribing
  - Foreign visitors
  - Treatment of overdoses

## Education

- University schools of forensic science
- University schools of pharmacy

# What TICTAC provides

- Immediate visual identification of tablets & capsules
- Determine the legal status of drugs
- Establish what a drug is used for
- Drug test cross reactivity
- Education, Reference and News on drugs and drug abuse
- Index of drug slang

# Benefits for the Police

- Instant results – saves Police time
- Avoid costly laboratory submission of non-controlled drugs
- Rapid confidential answers to drug ID enquiries
- Education & training
- Pace 2 compliancy in custody
- Supports specialist users

**TICTAC SAVES MONEY & SAVES TIME**



# TICTAC users

## Example of uses within forces

- Control Rooms
- Drug Liaison Officers
- Custody Suites
- Patrol & ACU Officers
- Drug Education / Expert Witness
- Drug Squads / Serious Crime
- Scientific Support
- Property Stores
- Chemist Inspection
- Community Policing
- Scene of Crime Officers
- Traffic (multi-agency vehicle searches)

# Products collected

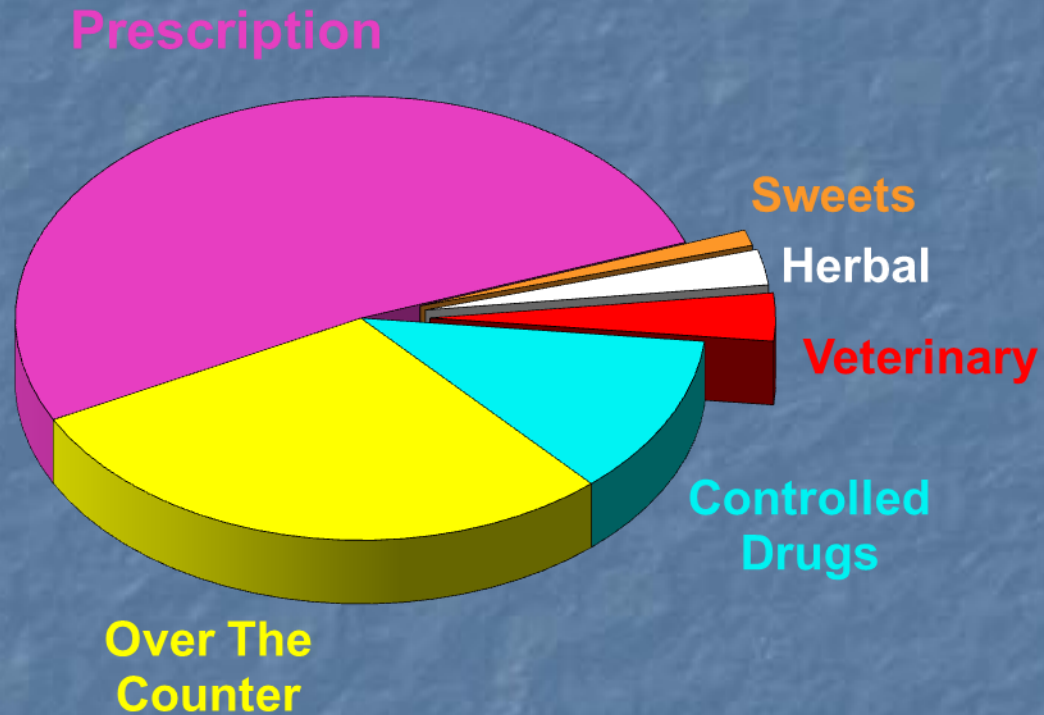
- Prescription only products
- Over the counter products
- Licensed parallel imports
- Health and herbal
- Veterinary products
- Homeopathic medicines
- Illicit tablets & capsules
- Transdermal patches
- Stamps (mostly LSD)
- Confectionery
- Anything that resembles a tablet or capsule

# TICTAC database

<b>Products</b> (tablets & capsules etc.)	<b>30,000</b>
<b>Drugs</b> (active ingredient)	<b>3,823</b>
<b>Suppliers</b>	<b>1,120</b>
<b>Pictures</b>	<b>77,000+</b>



# Products by status





POM antiangina – prevent heart attacks



POM - diabetes

POM – epilepsy



POM antihypertensive - treat high blood pressure, prevent heart attacks



POM – antipsychotic – treat psychoses and other mental illnesses



MDMA    MDMA    Amphet.    MDMA    2C-B    Amphet.    -----Confectionary-----

# Where does the data come from?

- TICTAC subscribers
- Pharmaceutical Industry
- Manufacturers
  - Confectionary
  - Health & Herbal
- Medicines & Healthcare products Regulatory Agency
  - Parallel imports
- Forensic Laboratories
- Police
- Customs
- Prisons
- Test purchases
- Amnesty bin analysis



# Amnesty bin analysis

Innovative data collection methods for illicit drugs

- Drugs deposited in bin as the result of a search as condition of entry to club or music festival
- Bin emptied in the presence of a Police officer
- Contents documented and sealed in evidence bag
- Bag collected from Police station
- Transported to laboratory in evidence bag
- Analysed
- Results disseminated using TICTAC
- Home Office Licensed



# Amnesty bins



<http://www.arengineering.co.uk/drugcabinets.html> , cost £103 +VAT



# Drugs & Clubs





# Drugs and Festivals





# Amnesty bin contents - clubs



Small club



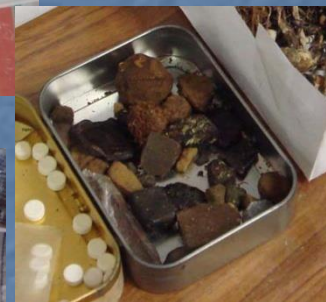
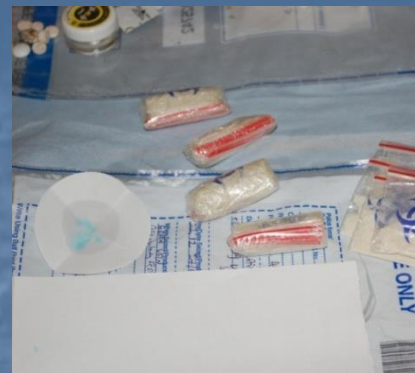
Large club



Cannabis

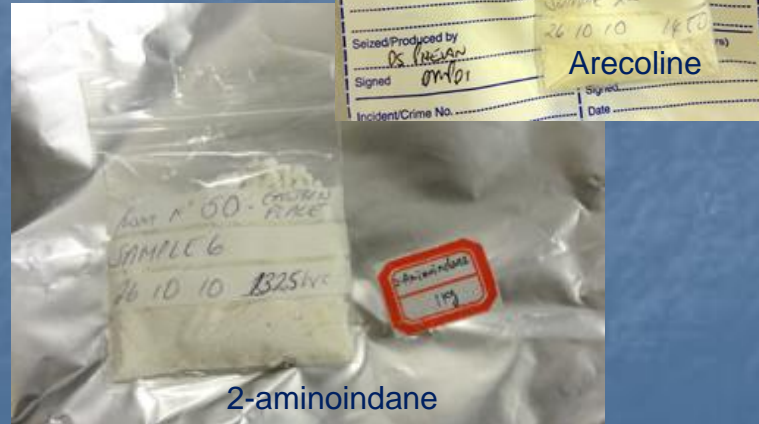
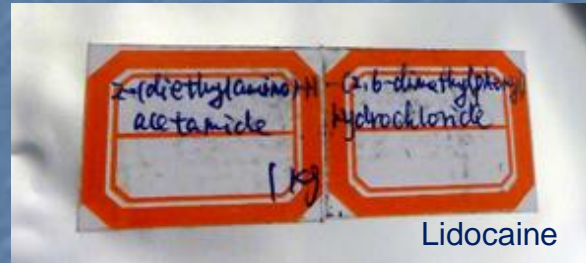


# Amnesty bins - festivals



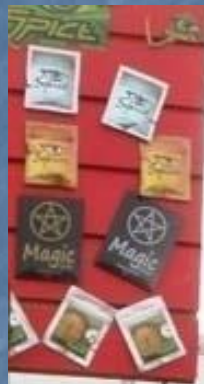


# Impounded drugs





# Test purchasing





# Test Purchases from websites

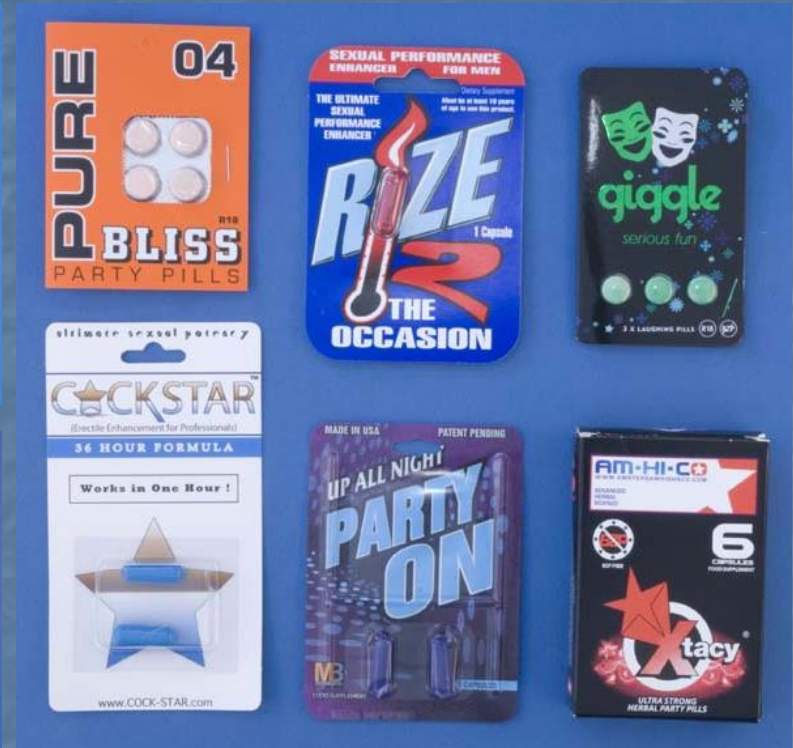
AmHiCo



Red Eye Frog



Everyone Does It



Biorepublik



Salviadee



“Research chemicals” - not for human consumption



# What we find: Piperazines



BZP + TFMPP



CPP



CCP



BZP + TFMPP + caffeine



CPP



BZP + caffeine



BZP



BZP + TFMPP

# Ecstasy (MDMA)



No marking



Trade mark  
symbol



Armani



No mark



Omega



Diamond



A



# Crystals

- Very little crystal meth
- Very little crack cocaine



Lots of crystal MDMA



# Paraphernalia



Cannabis paraphernalia



Snorters





## Drugs in ecstasy tablets marked with the Mitsubishi logo

- Ephedrine, Ketamine, Paracetamol, Caffeine
- MDMA
- Ephedrine, Caffeine
- Diazepam, Ketamine
- Ephedrine
- Ketamine
- DL-amphetamine
- MDMA, Caffeine
- MDMA, MDEA
- Ephedrine, Ketamine
- PMA, PMMA





# Fake Ecstasy tablets



**Defaced Pro-plus,  
caffeine**



**No drug, plaster-of-Paris**



**170 tablets**



**Hand engraved logo,  
xanthanol niacinate ?**

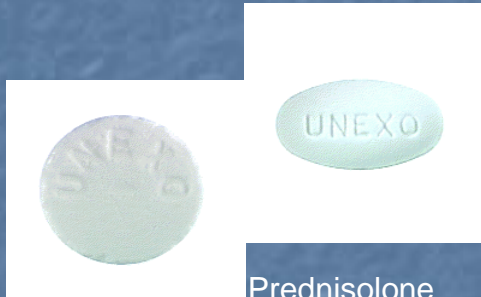


# Confectionary easily confused with ecstasy



detect artificial sweeteners (e.g. aspartame, acesulfame) as confirmation that product is confectionary

# Oral Anabolic Steroids



Prednisolone

Unexolabs (PVT) Ltd.  
Pakistan



Methandrostenolone



Akrikin Pharmaceuticals  
Russia



Stanozolol  
Unknown



Methandrostenolone

Unknown



Stanozolol

British Dragon  
China



Methandrostenolone

British Dispensary (LP) Co Ltd  
Thailand



## Diazepam tablets of unknown origin



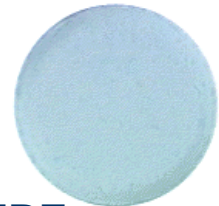
**CX 10**



**MSJ**



**WILSHIRE**



**BJ / 5**



**K 5mg**



**g**



**MANO 10**



**W or M**



**TP / 10**



# Hallucinogenic (magic) mushrooms



*Psilocybe semilanceata*  
Liberty Cap

<http://www.canedintotnes.co.uk/mushrooms/libcap1.htm>



£10  
13.5g

from Holland ?

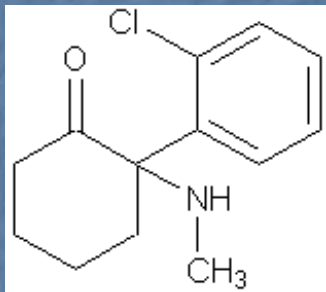


*Psilocybe cubensis*  
Colombia

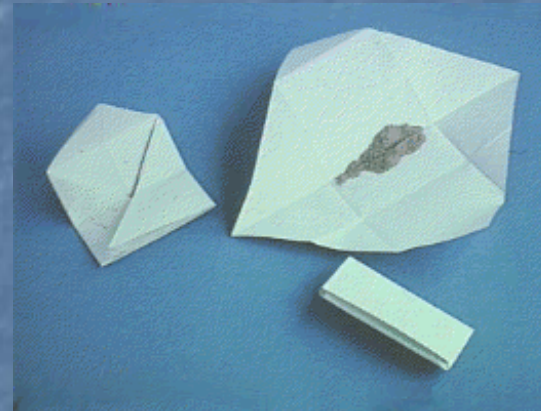


# Ketamine

dissociative anaesthetic



Intravenous anaesthetic  
human & veterinary

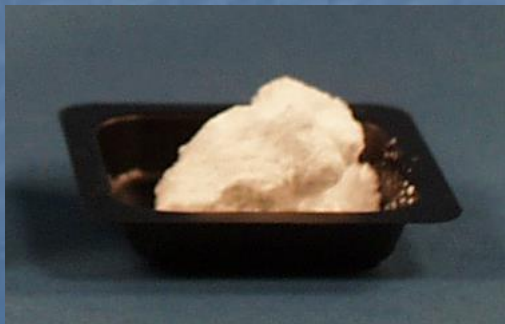


Solution evaporated  
& powder used in  
tablets or snorted

# GHB gammahydroxybutyrate

## GHB is a solid

- usually seen as a liquid also as powder in wraps or plastic bags or in capsules
- methods for GHB production easily available on Internet - produce preparations of unknown concentration





# New Psychoactive substances ("LEGAL HIGHS")

