National Assembly for Wales
Health and Social Care Committee
Inquiry into new psychoactive substances
("legal highs")
Evidence from North Wales Police - LH 12

TICTAC®

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:

- 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?

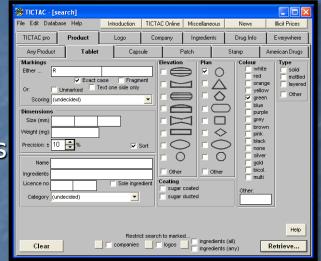
- Avon & Somerset *
- Bedfordshire*
- Cambridgeshire *
- Cheshire
- City Of London *
- Cleveland*
- Derbyshire
- Devon & Cornwall *
- Dorset *
- Essex
- Europol
- Garda
- Gloucester*
- Grampian
- Greater Manchester
- Gwent *
- Guernsey Police
- Hampshire *
- Hertfordshire
- Home Office
- Kent*
- Lancashire
- 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



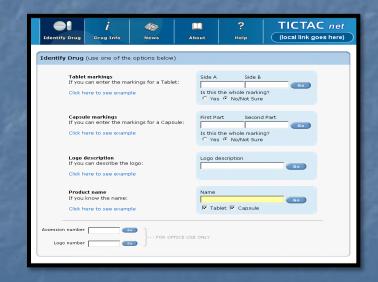


TICTAC Net

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

TICTAC Mobile

- For mobile/Smart phones
- Similar to TICTAC net





© TICTAC Communications Ltd.

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

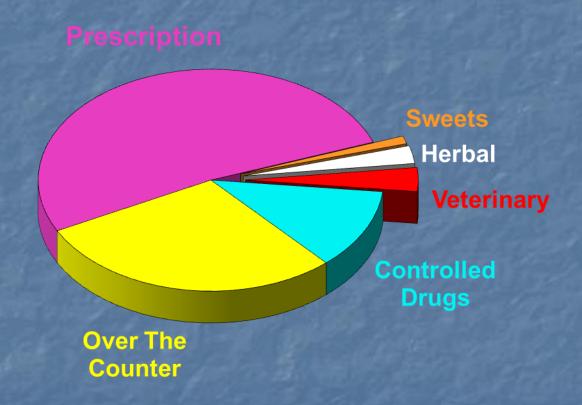
Products (tablets & capsules etc.) 30,000

Drugs (active ingredient) 3,823

Suppliers 1,120

Pictures 77,000+

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



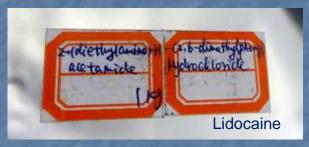
Cannabis

© TICTAC Communications Ltd.



Impounded drugs















Test purchasing



Test Purchases from websites

AmHiCo



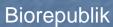
Everyone Does It







































What we find: Piperazines



Ecstasy (MDMA)



Crystals

- Very little crystal meth
- Very little crack cocaine





Lots of crystal MDMA

Paraphernalia



Cannabis paraphernalia

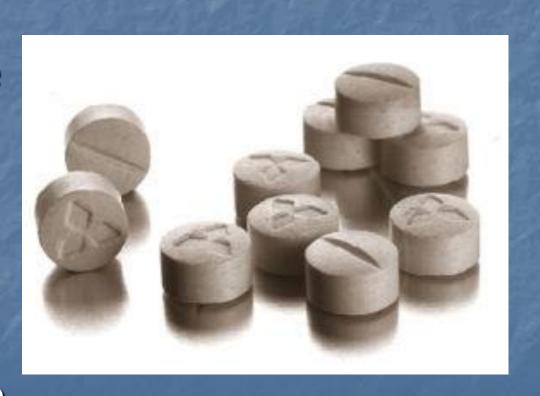


Snorters



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



xanthanol niacinate?

© TICTAC Communications Ltd.

Confectionary easily confused with ecstasy



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

Oral Anabolic Steroids



Unexolabs (PVT) Ltd. Pakistan



Methandrostenolone

Unknown



Methandrostenolone



Stanozolol

British Dragon
China



Akrikhin Pharmaceuticals Russia



Stanozolol Unknown



Methandrostenolone

British Dispensary (LP) Co Ltd

Thailand

Diazepam tablets of unknown origin



Hallucinogenic (magic) mushrooms



Psilocybe semilanceata Liberty Cap

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



13.5g

from Holland?

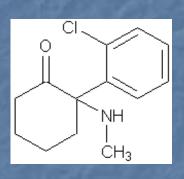




Psilocybe cubensis Colombia

Ketamine

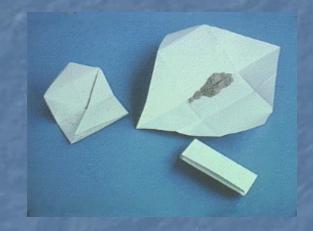
dissociative anaesthetic





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")







































