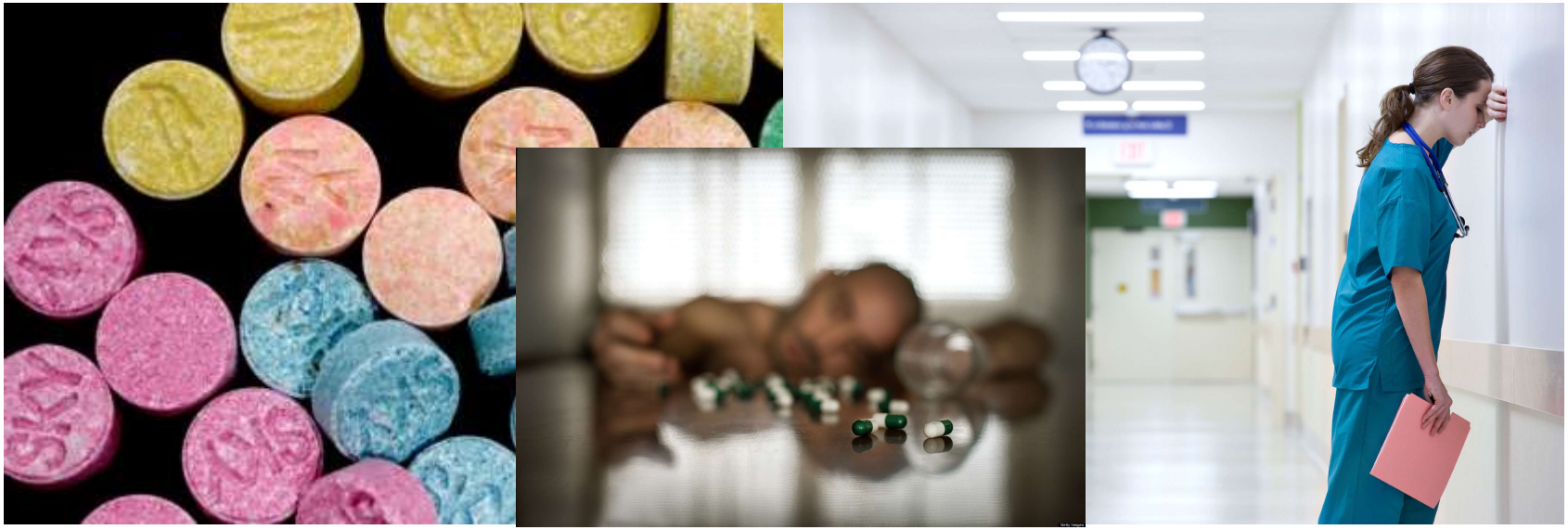
SERSTECH

Chemical intelligence solutions

Case Study 2 - Police Narcotics Investigation

Narcotics- the current problem

Over the course of three months, 4 people have died from taking what they believed to be Ecstasy tablets. 15 people have been hospitalised with serious signs and symptoms. A serious increase over historical patterns.



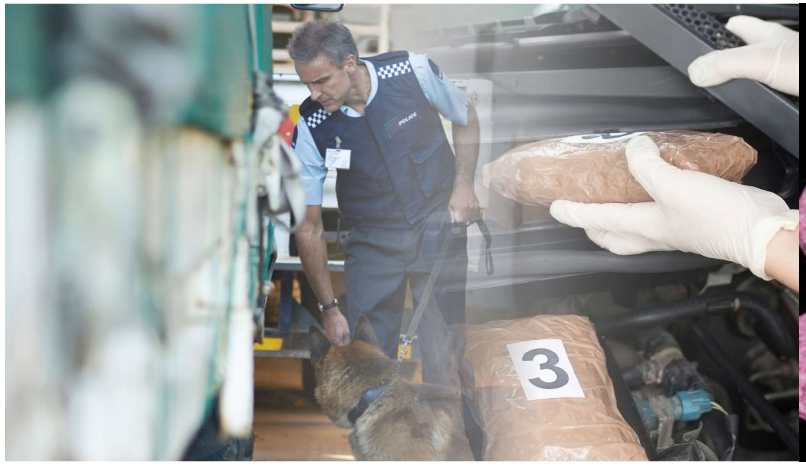
“Ecstasy” (MDMA) ketamine, and various other related “designer drugs”.

Sources of the nightclub drug :

- Long-standing trade in imported MDMA, Ketamine
- Homemade drugs, made in improvised, local laboratories.
- Smuggled drugs that have been tainted or “cut” with other ingredients
- High quality drugs made by reasonably skilled and experienced chemists.
- Poorly made drugs containing unsafe and potentially lethal contaminants.

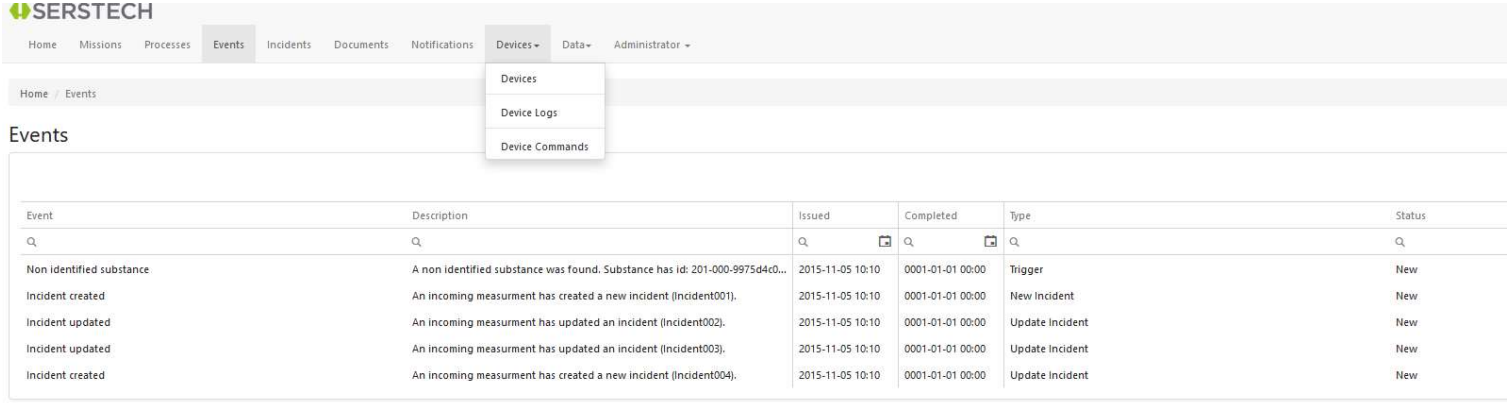
Information of interest during the investigation:

- How to tell the drug apart from similar pills found in other nightclubs?
- How to tie the 4 fatalities and 15 serious illnesses to specific nightclubs?



Historical Data

- The detective enters historical data to ChemDash:
  - Arrests for possession and trafficking,
  - Laboratory reports on drug quantity and quality,
  - Data on drug seizures,
  - Summaries of information from informants.



In general terms, the fatalities and illnesses can be narrowed down to two geographical areas. The investigators now have two sectors of the city in which to focus their efforts.

A serious investigation begins

- First step, with the assistance of the handheld chemical analysis equipment, a drug detection dog and the ChemDash software:
  - Collect drug samples
  - Collect useful chemical intelligence
  - Find out which venues are tied to which supplies of drugs and draw a network map
  - Draw a schematic of the supply network

The heart of the operation will be undercover operations to buy drugs. The two undercover detectives and the informant have been given some funds and will be sent into a variety of night clubs to purchase Ecstasy.

The investigation

- The two undercover detectives and the informant are supported by narcotics detectives with Serstech 100 identifiers:
  - The detectives analyse the drugs with the Serstech 100 indicator and upload the spectrum onto the ChemDash
  - Photographs from smartphones.
  - The presence of police scare some people into dropping their drugs into rubbish bins or into nearby bushes. Later, narcotics detectives covertly empty the rubbish bins.
  - The drug dog assists with searches around the shrubs and bushes, yielding more samples.

Analysis

- With the assistance of ChemDash the analysis of the covertly obtained Ecstasy samples, five kinds of tablets on the market, are presented as following:

Spectra of the sample	Number found	Additional information from the Laboratory
A	35	Contains MDMA and inert ingredients in a specific blend
B	20	Blend similar, but not identical to A, also likely to be an import.
C	25	Diluted MDMA, with a small amount of PMA. Possibly a poorly manufactured product.
D	16	Very little MDMA. Large percentage of PMA and 4-MTA. An attempt to fake an MDMA pill using less expensive ingredients.
E	9	Some MDMA content. Significant percentage of methamphetamine. No PMA or 4-MTA.
Total	105	

Analysis

- Following breakdown over time is interesting as well:

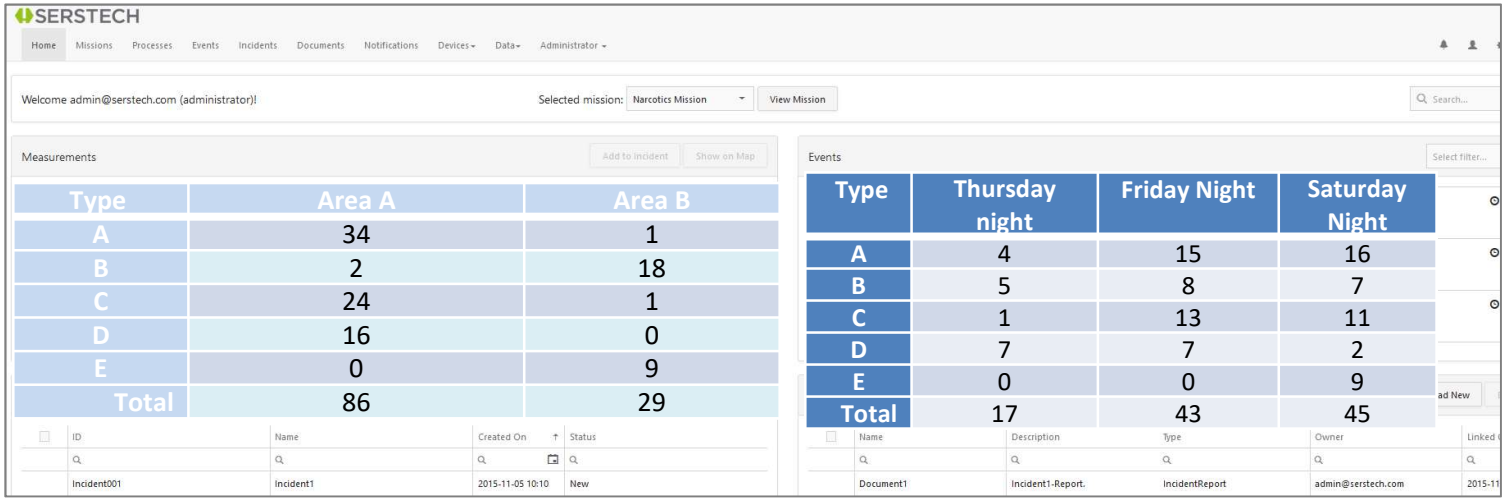
Type	Thursday night	Friday Night	Saturday Night
A	4	15	16
B	5	8	7
C	1	13	11
D	7	7	2
E	0	0	9
Total	17	43	45

- Breakdown by geography is even more interesting:

Type	Area A	Area B
A	34	1
B	2	18
C	24	1
D	16	0
E	0	9
Total	86	29

Conclusions from ChemDash data

- Type A ecstasy is closely associated with Area A. Type B ecstasy is closely associated with the Area B territory.
- There is an attempt to compete with the existing suppliers.
- The highly dangerous C and D types of drug are almost entirely a problem in Area A
- The type E drug has a clear association with two specific locations in Area B on Saturday nights. It seems to be the effort of a single individual.
- Based on a thorough debriefing of the undercover detectives and the informant, a number suspects are now identified.



Saturday night, time for the operation

- Target three nightclubs which will be under a wide variety of surveillance.
- Identify which specific drug dealers are handling the tainted drugs.
- Focus the surveillance specifically on the dealers handling the modified and tainted drugs in order to understand their supply chain.

The Serstech 100 Indicator is a critical part of this surveillance effort. The detectives need to rapidly analyse samples. Several undercover detectives take specific samples out of the club to the cars. The detectives in the car will rapidly identify the drugs and upload to ChemDash.

The Take-Down

Time is of the essence, in the time that the police laboratory might take to process these samples, production could have moved to a new location...

- Four dealers associated with the bad drugs are identified
- Two locations are identified
- Surveillance on suspected laboratory locations
- Rubbish from both locations seized and examined by technicians with a Serstech 100 Indicator
- In one container the substance catechol, a key Ecstasy precursor, was found
- The other container included traces of pseudoephedrine, a pharmaceutical used in methamphetamine manufacture.

Targeted Surveillance

- Arrest the drug dealers and attempt to identify the network
- The final objective is to find the laboratories producing the bad drugs.
- The drug dealers can be prosecuted as part of a major rolling-up operation.

Labs under surveillance and tactical teams ready to strike.

- Four persons have been arrested.
- A significant amount of tainted or modified ecstasy is captured as well as laboratory equipment and money
- Arrest and /or search warrants against other members of the network.

Conclusion

A clandestine drug lab can be a health and safety nightmare. The various chemicals are almost never labelled. The tactical team is immediately followed by several hazardous materials technicians borrowed from the fire department. They need to make sure the crime scene is safe and that dangerous items are properly handled before evidence technicians can fully process the scene. They bring with them their newest device, a handheld chemical identifier from Serstech….