

## LW3 A Review of Changing Crime Patterns and the Development of Forensic Science in Ireland

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After attending this presentation, attendees will better understand how various techniques became acceptable and which techniques suited particular cases.

This presentation will impact the forensic science community by presenting the changes in the use of explosives, the variation in drugs abused, and the increased capability developed due to the availability of DNA.

This presentation reviews some case histories and uses them to outline the changing patterns in crime and the developments in forensic science from 1979 to 2017.

Following this presentation, attendees will appreciate the manner in which forensic science developed in one Common Law country and will have received an overview of the way in which crime pattern changes prompted changes in the management and resource allocation of forensic science services.

The forensic science service consisted of 5 people in 1979 and had grown to more than 100 in 2017. During this period, the nature of organized crime changed from one in which subversive crime and ordinary crime were quite separate to one in which the boundaries are more difficult to decipher. The rapid increase in drug abuse in the early 1980s began with the abuse of heroin in the poorer sections of the inner city to the situation today in which the full range of drugs are abused across all sections of the population countrywide. The ease of availability of drugs caused a drop in the number of armed bank robberies, as did improvements in bank security. Until the 2000s, the challenge for forensic science was quantity, but this changed with the so-called "head shop" phenomenon. The analytical challenges of dealing with new psychoactive substances are particularly focused on the acquisition of suitable reference material.

The "Troubles" in Northern Ireland affected crime patterns in the Republic of Ireland, and this presentation will trace the changing use of explosives throughout the period. While the Good Friday Agreement put an end to most of the subversive crime, the effect continues to this day with a more widely spread use of explosives within the criminal world than previously experienced. The nature and type of explosives changed according to availability of materials and the challenge for the forensic science community was a lack of information in a pre-internet era.

Over time (from the mid-1990s on), as with most laboratories, resources were diverted from particulate trace evidence to DNA. The focus in the introduction of DNA tended to be on the technology; thus, the lessons from traditional trace evidence did not necessarily transfer to the DNA area. High successes using this technology masked this issue for many years.

Historical, Case Histories, Technique Development