

INTERPRETING CRIME STATISTICS

A Background Briefing Note

There are many challenges involved in the proper interpretation of crime statistics. The Central Statistics Office has prepared this short paper to help users of the statistics better understand some of the issues involved.

The note covers some issues around administrative sources of crime statistics, in particular Garda sources and the PULSE system. It should be remembered that there are other crime types which are processed by organisations other than the Gardaí, although that aspect is not covered in this note.

The note also covers Crime and Victimisation (C+V) surveys. Today's release of the CSO C+V survey follows on from the recent publication of the EU International Crime Survey (ICS). Some differences in approach and coverage between these two sources are discussed in this note.

1.1 Administrative Sources - PULSE

Today's release, "Headline Crime Statistics", is based on data recorded in the Garda PULSE system. The PULSE system was introduced in late 1999 and led to major changes in how crime statistics were recorded and compiled. One of the biggest changes was in crime classification. Up to the introduction of PULSE, Garda statistics were based on *Indictable* and *Non-Indictable* categories. This was often taken by commentators to mean "serious" and "less serious" crime incidents, respectively. Following the introduction of the PULSE recording environment this distinction was no longer used and was replaced by the categories *Headline* and *Non-Headline* crime, which are still in use today. This *Headline/Non-Headline* distinction was still largely based on historic and legal distinctions. These, too, are often interpreted as referring to "serious and "less serious" crime incidents.

It is inevitable that using legal distinctions such as *Indictable/Non-indictable* or other legally based distinctions such as *Headline/Non-Headline* will lead to some anomalies. Crimes which might be regarded by some as less serious are included in the *Headline* figures, while other crimes which today might be considered more serious are included in *Non-Headline* categories. Also, some crime types are split between the two groups. For example, the taking of a motor vehicle can be either *Headline* or *Non-Headline* (depending on whether it is seen as a theft or an unauthorised taking at the time of the incident). Some assaults with less serious consequences are *Non-Headline* while more serious assaults are *Headline*.

The perceived (by society) seriousness of a crime incident is also time dependent. Drink-driving, for example, is perceived to be a more serious crime today than it was at the time of the 1961 Road Traffic Act. Crimes such as drink-driving, careless driving and speeding are currently categorised with traffic offences in the *Non-Headline* category. However, when crimes such as these have serious consequences (such as death or serious bodily harm) they are included as *Headline*. This reflects the legal situation, where different charges can be preferred against an individual depending on the consequences of an action, rather than the behavioural characteristics of the action itself. However, in today's environment, it is likely that most users of crime statistics would prefer incidents such as drink-driving and speeding to be displayed more prominently in the presentation of the statistics.

1.2 Reporting of Crime to the Gardaí

Garda statistics can only reflect crimes that become known, or are reported to the Gardaí. Many crimes are not reported. As can be seen from information in the "Crime and Victimisation" release, the reporting of crimes is influenced by a number of factors. Perceived seriousness of the crime, the financial loss involved and beliefs around whether the Gardaí are in a position to do anything about the crime incident are among these factors. Reporting rates can (and do) change over time and can vary depending on the geographical location in which the crime occurs. Many other factors influence the reporting rate, such as the need to report for insurance purposes, perceptions about the likely success of criminal proceedings and the severity of sentence. About 30% of burglaries are unreported as are nearly four in ten incidents of theft with violence (robbery). Other crimes are reported even less to the Gardaí.

International (and Irish) experience suggests that offences of a sexual nature and incidents of domestic violence are grossly under-recorded in police statistics.

Therefore, even when comparing two periods in which the levels of crime remained identical, changes in reporting rates would suggest that the number of recorded crimes would not be the same.

1.3 Effect of Garda activities and other factors

Changes in Garda priorities and activities have an influence on the number of crimes recorded. A change in Garda practices in detecting speeding will affect the number of speeding incidents recorded. Changes in the law with regard to random breath testing influences Garda activity and hence influences the number of offences detected and recorded. A change in shop-owners' approaches will also influence the number of crimes reported and recorded. If a shop-owner changes policy and decides that all incidents of shoplifting must be reported to the Gardaí, then this will be reflected in the statistics.

Increased Garda activity in the area of drug searches will have a similar effect. What would otherwise be considered as successful policing (increasing the number of persons found in possession of illegal drugs) will result in the number of recorded crimes increasing.

The above are just some examples whereby changes in policy and activities by Gardaí and others result in increases in recorded crime, *even if the number of crimes actually occurring remains the same.*

1.4 Garda recording environment

Over the last year, the Gardaí have introduced a fundamental change to how incidents are entered on the PULSE system. Most incidents are now recorded centrally at the Garda Information Service Centre (GISC) in Castlebar as a result of telephone contact with locally based Gardaí. Up until then, the system was not centralised and the local Gardaí entered all incidents on PULSE.

Obviously, the change from a paper-based system to the PULSE environment in 1999 was a huge change in recording environment. Leaving aside the classification issues referred to above, which led to a discontinuity in the crime statistics series, large changes in recording environments always have an impact. The PULSE system is primarily an invaluable operational tool for the Gardaí in their day-to-day business and does not exist simply for statistical reporting. When PULSE was introduced, the major focus was on ensuring that PULSE supported Garda business needs.

The move to a centralised recording environment has led to considerable opportunities from a statistical perspective. The Gardaí and the CSO are working together to maximise these opportunities.

1.5 Interpretation and use of Garda crime statistics

Because of issues such as those mentioned above, using total recorded crime (or total recorded *Headline* crime) to measure actual crime trends over time is particularly unsafe. From an overall perspective, the value of the Garda data is maximised when individual crime types are examined independently over time (such as homicides, robberies, burglaries, etc). Looking at crime types in the context of other information is also very useful – for instance, examining the number of sexual assaults in the context of the likelihood of such incidents being reported.

Other major elements of statistics generated from Garda sources include items such as detection (or clear-up), geographical location of incidents (location of crime hot-spots, etc) as well as outcomes of justice procedures.

However, even looking at a series of overall detection rates can potentially be misleading. For a given overall recorded crime total, the overall detection rate always depends on the mix of the constituent crimes making up the total. Some crimes are, by their nature, detected more frequently than others. Indeed, some crime types are recorded because they are detected (drink-driving, possession of drugs etc). Others (such as theft, assault, burglary, etc) are usually recorded on foot of a report from the member of the public and the subsequent result can be either that the crime is detected or not detected. Therefore, the general point made above about the interpretation of recorded crime statistics applies here also – detection rates are best looked at in the context of particular crime types rather than as an overall measure.

1.6 New Crime Classification system

The CSO, in conjunction with an advisory group on crime statistics, is developing a new classification system, which will be introduced during the summer of 2007. This will coincide with the publication of annual Garda statistics for 2006. This publication will also include retrospective data (from 2003) using the new classification system.

The new system is being developed in the context of the points made above. It will be a less-legally based, hierarchical system, and the concepts of Headline and Non-Headline offences will no longer be used. The system will also encompass non-Garda reported crime.

2.1 Crime and Victimisation (C+V) Surveys

It is common in most countries to conduct regular large-scale C+V surveys. International organisations are becoming more active in the area of crime measurement. Both the EU (through Eurostat) and the UN have begun processes, which should lead to commonalities in the way C+V surveys are conducted across countries. In Ireland, a crime and victimisation module has been included in the Quarterly National Household Survey (QNHS) on three occasions: in the last quarters of 1998, 2003 and 2006. It is intended to introduce a separate dedicated C+V survey in 2008 that will be repeated at two year intervals. This will be more comprehensive than the QNHS module and will facilitate the achievement of greater comparability with surveys conducted elsewhere.

The fundamental approach of C+V surveys is to interview a sample of individuals about their exposure to certain crimes over a 12-month period. If a respondent has been a victim of crime in the preceding 12 months, he/she is asked about some details of the offence and whether or not it was reported to the police. Respondents are also usually asked questions about feelings of safety in the local neighbourhood or at home after dark, as well as questions about police performance in the local area.

C+V surveys differ with respect to size and methodologies. Some use telephone interviewing while others use face-to-face questioning. One of the major advantages of C+V surveys is that they can be repeated using the same methodology and so trends over time can be measured.

2.2 CSO Crime and Victimisation survey and EU International Crime Survey (EU ICS)

Recently, results of the EU ICS were published. The EU ICS is part of a larger International Crime and Victimisation Survey (ICVS) which includes many countries throughout the world. The methodology is kept as similar as possible from country to country. The CSO was not involved in carrying out the EU ICS. Results from this survey indicated that Ireland had the highest prevalence in Europe for ten common crime types in 2004. However, as this was the first time that Ireland had participated in this survey, it was not possible to examine the situation in Ireland over time using this source.

There are differences in the size, scope and methodology between the CSO survey and the ICS.

The CSO survey used face-to-face interviewing in about 29,000 households throughout the country. This represents a response rate of 92%. The EU ICS interviewed just over 2,000 persons by fixed-line telephone survey. The response rate was 42% (this included "non-contacts" as well as refusals). The difference in sample sizes in itself does not necessarily lead to differences in the estimates. However, low response rates for a crime and victimisation survey can result in prevalence estimates which are too high as those with "nothing to tell" may be less likely to participate. Conversely, it may be the case that those who are hard to contact may be, on average, more at risk of being victims of crime because of their mobility. The effects of non-contact and non-response are largely unknown. It is also unknown whether the effect of low response is similar across countries.

Apart from size and methodology, there are some important coverage differences between the two surveys. There are also differences in question sequencing.

Coverage Issue	EU ICS	CSO C+V
Age threshold	16 years +	18 years +
Domestic violence	Yes	No
Sexual assault	Yes	No

The coverage of those aged 16 years and over in the EU ICS is becoming standard internationally and will be adopted by CSO in future C+V surveys. It is likely that those in their late teens can be more vulnerable than average to some crime types.

The EU ICS covered domestic and sexual assault by means of specific questions from the telephone interviewer. Respondents are asked about being grabbed, touched or assaulted in an offensive way, including incidents which occur domestically. Respondents are also asked about being attacked or threatened in a frightening way, bearing in mind that such incidents can occur in a domestic environment.

The CSO survey specifically excluded sexual and domestic assault. This is because such topics are considered too sensitive for this type of face-to-face survey, as the events they refer to are often traumatic in nature. Specific supports would need to be offered to respondents (and interviewers) to enable the asking of such questions in a C+V survey. It is anticipated that these topics will be covered in future C+V survey programmes.

2.3 Comparison of CSO Survey and EU ICS results

	CSO 2003	EU ICS 2004	CSO 2006
	%	%	%
Theft with violence	1.4	2.2	1.2
Theft without violence	3.1	7.3	2.5
Physical assault	1.2	4.9	1.1
Burglary Attempted Burglary	3.4	2.3 1.8	3.2
Car theft Motorcycle theft	1.2	1.2 0.3	0.9
Theft from car	3.5	5.2	3.4
Bicycle theft	3.6	2.5	3.5
Reporting burglary Feeling unsafe or very unsafe in local area after dark	69 25	85 27	70 26
With burglar alarm	31	30	34

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