

Ministerial Committee on Drug Policy
28 April 2008

Agenda Item 6
(Hon Annette King)

ILLEGAL DRUG HARM INDEX

Purpose

1. The purpose of this paper is to inform Ministers about the completion of the Drug Harm Index, the key findings from the research and the next steps with regard to releasing the research.

Background

2. New Zealand Police gained funding of \$125,000 from the Cross Departmental Research Pool to commission researchers to construct a New Zealand specific Drug Harm Index (NZDHI). The Ministerial Committee on Drug Policy (MCDP) received an update on the development of the NZDHI at the meeting of 7 August 2007.
3. Police conducted a full tender process and selected Business and Economic Research Limited (BERL) to develop the NZDHI.

Objectives

4. The objectives for the NZDHI are to:
 - Quantify drug related costs, which will not just identify how expensive the problem is, but also identify where the avoidable costs lie, and what could be done to minimise them.
 - Help to answer questions about the benefit-to-cost ratio of current illicit drug strategies and policies, in particular the effectiveness of supply reduction efforts by enforcement agencies.
 - Offer insights into the impact of supply side interventions. The NZDHI will contribute significantly to current understandings about the balance of investment between drug demand reduction and drug supply reduction initiatives. Using the Index will assist key decision makers and enforcement agencies to better gauge the cost-effectiveness of drug supply reduction efforts. It will enable improvements to be made to multi-agency and cross-sector approaches, encourage consensus about the value of certain types of interventions, and identify opportunities for synergies between interventions.
 - Provide a means to potentially benchmark our performance in this area against overseas jurisdictions, particularly Australia, and, having set the benchmark, begin to track New Zealand's progress over time.

Methodology

4. The New Zealand Drug Harm Index has been broadly modelled on the Australian Drug Harm Index developed by the Australia Federal Police, which was based on the Collins and Lapsley (2002) study of substance abuse in Australia¹. However, the NZDHI differs in that estimates are built from the bottom up where possible, rather than working from aggregate estimates or data from other countries. The NZDHI uses NZ data on drugs and drug user behaviour. It demonstrates a more comprehensive range of impacts, including a wider range of crime, work and health service consequences.
5. Three broad categories of cost are considered: direct costs, indirect costs and intangible costs. These categories contain further disaggregated costs such as crime costs, road accident costs, health care costs, lost production costs and reduced quality of life.
6. The work involved three stages. First, it estimated the total harm from illicit drug consumption in the base year of 2006. Second it determined the harm per kilogram of particular illicit drug types. The harm per kilogram estimates indicate the gross economic benefit of drug seizures. Third, it developed a metric called the New Zealand Drug Harm Index based on illicit drug seizures between 2000 and 2006.
7. Validity checks were carried out using a selection of dummy scenarios to generate index numbers, which were scrutinized to ensure that the calculated values satisfied the 'common sense' tests and were in line with expectations. Separate tests were carried out to ensure consistency and comparability with the Australian DHI.
8. Peer review has been carried out on specific elements of the NZDHI by Des O'Dea (Public Health Department, Otago University) and Dr Ian Sheerin (Department of Public Health and General Practice, Christchurch School of Medicine). The draft report has been peer reviewed by Dr Chris Wilkins, leader of the Illegal Drug Research Team, Centre for Social and Health Outcomes Research and Evaluation (Massey University).

The NZ DHI - Key findings²

9. The study shows that the harm from drugs consumed in 2006 is substantial and that illicit drug seizures may have prevented approximately another third again of harm.
 - Illicit drug use in 2006 caused an estimated \$1.31 billion of social costs. This was made up of \$1.09 billion of tangible resource costs (0.70 percent of GDP in 2006) and \$217 million of intangible psychological costs to drug users and crime victims.
 - Tangible costs reflect productive resources diverted due to drug use. Drug production (\$519m), crime (\$414m) and lost output (\$106m) were the largest resource drains. A further \$53.3 million resulted from drug attributable health care and road accidents.

¹ Collins DJ and Lapsley HM (2002), *Counting the cost: estimates of the social costs of drug abuse in Australia 1998-99*, Commonwealth Department of Health and Aged Care, Canberra, Australia.

² Extracted from Business and Economic Research Ltd, *New Zealand Drug Harm Index*, Report to New Zealand Police, April 2008

- Illicit drug seizures potentially avoided \$458 million of drug harm in 2006, and \$3.67 billion in total over the seven years between 2000 and 2006.

10. The effects of illicit drug use in 2006 vary significantly by drug type.

- Stimulants account for over two-fifths of social costs (41.7 percent, \$551 million) and stand out as the second largest source of tangible costs for user at \$2,670.
- Cannabis is responsible for over a third of the social costs of illicit drug use (32.9 percent, \$431 million), but it causes relatively little harm per kilogram (\$11,790) and per user (\$1,680)
- Opioids generate almost one quarter of the drug harm (24.9 percent, \$326 million) and have the highest tangible and quality of life costs per user (\$202,190).
- LSD is the most damaging drug per kilogram, at over \$1.05 billion per kilogram, but due to the small amount consumed per occasion it causes the smallest harm per user (\$265).
- Limiting the scope to similar cost categories, total drug harm in New Zealand is comparable, if slightly lower, than that in Australia after adjusting for New Zealand's smaller population and lower overall drug use prevalence. However, the pattern of harm differs significantly across the drug types and cost categories. As a proportion of total harm, stimulants in New Zealand cause almost three times as much harm while opioids and cannabis cause just over one-half to three-quarters of the harm in Australia.

11. Overall the NZDHI is driven by cannabis seizure due to the sheer volume of cannabis seized. Police and Customs collectively seized just over 33,480 kilograms in 2006 and just under 295,590 over the seven years from 2000 to 2006. However, illicit drug consumption in 2006 still resulted in substantial harm. Potential harm avoided by seizures of non-cannabis illicit drugs composed 13.7 percent of the DHI in 2006. But a large quantity of these drugs reached the market and accounted for 63.5 percent of actual drug harm in 2006.

12. The DHI provides a tool for measuring potential harm avoided over time. Changes in the Index between years are driven by changes in drug seizure volumes rather than changes in the pattern of harm. That is, the Index is based on a constant set of drug harm estimates per kilogram that are applied to seizures in different years. Actual harm depends on consumption not seizures. How drug seizures reduce harm depends on factors such as the resources expended in interrupting supply and the net effect of the interruption on consumption. The DHI model provides a resource to assess these effects.

Next Steps

13. BERL will work with Police to develop a plan for maintaining the NZDHI, including data that will need to be updated on a regular or occasional basis, plus identifying key assumptions and parameters that should be revisited or verified in time.

14. A media plan will be developed to ensure the most effective release of the DHI and readiness of effected agencies to respond to enquiries following the release of the data.

15. Police propose that they lead the development of the media plan in consultation with the Steering Group and other interested IACD members.

Recommendations

That MCDP:

16. **note** that a model has been developed for the New Zealand Drug Harm Index.
17. **note** that Police will work with BERL to develop a plan for maintaining the NZDHI.
18. **note** that Police will lead the development of a media plan for the release of the New Zealand Drug Harm Index, in consultation with the Steering Group and other IACD member agencies.