

Compulsory Drugs Testing in the British Army

Assessing the Data

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Background

Compulsory Drugs Testing (CDT) of service personnel in the British Army, Royal Navy and Royal Air Force occurs by unit, for all ranks, and at a time which is unannounced, unpredictable and, ideally, at random with respect to weekday or weekend.¹

In the British Army, unlike in UK prisons,² random drugs testing was initiated on a no-names, no-punishment basis in order properly to establish positive rates per 1,000 personnel at baseline. Thereafter, punitive CDT became operational with 7 per 1,000 personnel tested being positive in 1996 [Lord Astor in answer to Lord Garden: HL3040]. Other nations' forces, such as the Irish Defence Forces, Canadian Forces, and the Australian and New Zealand armies, also invoke mandatory urine testing of service personnel, and dismiss those who test positive.

UK commentators and politicians have described the rise in class-A drug use in the British Army as: a) a reflection of society more generally; b) self-medication under the pressures of service; c) worsening troop shortages due to dismissals; and d) a CDT perversity because drugs which stay in the urine for only two to three days, such as heroin and cocaine, are the most harmful drugs. By contrast, cannabis stays in the urine for two to three weeks. Urinary half-life is uncertain for ecstasy, which is one of the least harmful drugs despite its A-classification.³

When data about CDT in the British Army, as gleaned from parliamentary questions, are analyzed in a wider societal context,⁴ the first explanation – 'reflection of society more generally' – can be ruled out. We raise new

questions: firstly, about whether CDT teams have re-targeted their testing on particular weekdays, which would maximize the cocaine positive rate; and secondly, about the rationality of military personnel's evasion tactics.

Data gleaned from parliamentary questions

The British Army tests 85 per cent of personnel annually, and those caught are almost always discharged [Watson in answer to Moore: 58313].

In September 2003, the British Army adopted an Early Intervention Programme (EIP: Drugs) [Harper: 66997], for which those testing positive for controlled substances may be eligible and, if successful, may subsequently be retained in the service. However, EIP: Drugs placements amounted to only 113 and 101 personnel in 2004 and 2005 respectively, whereas the number of army personnel testing positive exceeds 500 a year (see Table 1).

By happenstance or design, more army personnel undergo CDTs in the first quarter of the year. For example, during 2001-05, 126,427 (28.6 per cent) out of 442,034 army personnel tested underwent testing in the first quarter of the year compared to 108,051 + 101,822 + 105,734 in quarters 2 to 4 [Moore: 58314]. Parliamentary questions [Twigg in answer to Mercer: 157335, 23 October 2007] have not shed light on whether testing occurs preferentially on particular weekdays, as might be the case if intentionally targeted to test returnees soon after home leave. Nor do we know if, as in prisons,⁵ the British Army's pattern of weekday and weekend testing has altered since 1996, and in particular since 2003. Such changes in the CDT

Table 1: Summary of compulsory drugs testing in the British Army, 2001-06.

Calendar year	2001	2002	2003 ^{M2}	2004	2005	TOTAL 2001-05	2006LG
Personnel Tests	93,525	84,492	87,562 93,168M2	87,054	89,401	442,034 ^{M1}	(98,210 ^{INF}) 104,499LG
Personnel who tested positive	634	513	517	628	792	3,084H	769LG
Positive rate per 1,000 personnel tested	6.8	5.9	5.9	7.2	8.9	7.0	7.8 ^{INF}
Substance-specific positive tests (as per cent of substance-specific positives; and rate per 1,000 tests)				Declared drug use ^{BC2003/4 & 05/6} last month by 16-24 year olds in England and Wales			
Cannabis {cannabis only}			288 (50%; 3.1)	15.8% & 13.0%			278 {221} (31%; 2.7)
Cocaine {cocaine only}			126 (22%; 1.4)	2.8% & 3.0%			423 {340} (47%; 4.0)
Ecstasy {ecstasy only}			117 (20%; 1.3)	2.6% & 2.0%			138 {73} (15%; 1.3)
Amphetamines {amphetamines only}			41 (7%; 0.4)	1.6% & 1.6%			41 {15} (5%; 0.4)
Heroin {heroin only}			4				1 {1}
Others			4				10 {10 = benzo- diazepines}
Total substance-specific positive tests			580 ^{M2}				891 ^{LG}

^{INF}: number of personnel inferred to nearest 10 by use of 2003's ratio of personnel to tests, namely inferred personnel in 2006 = {87,562 personnel/93,168 tests} * 104,499 tests in 2006.

LG: Lord Drayton in response to Lord Garden, see Lords Hansard, 17 April 2007, column WA 36-38.

M1: Mr. Touhig in response to Mr. Moore, see Hansard, 16 March 2006, column 2435W [58314].

M2: Mr. Caplin in response to Dr Murrison, see Hansard, 18 March 2004, column 400W [161307] (where number positive personnel was given as 516, but later as 517 to Mr. Moore.)

regime can have a substantial effect on the rate of positive tests for infrequently-taken drugs which remain in the urine for only two to three days,⁶ such as heroin and cocaine.

The majority of those who failed drug testing in the army have been privates or junior non-commissioned officers. Indeed, these accounted for all but 19 of the 3,084 who failed CDT in 2001-05 [Touhig in answer to Harper: 66999].

In 2003, there was marked heterogeneity in the CDT positive rate by corps or infantry division [Caplin in answer to Murrison: 161307], ranging from 1 to 25 positives per 1,000 tests, but 6.2 overall. Training units accounted for 28,921 tests and 118 positives (4.1

positives per 1,000 tests: 95 per cent confidence interval (CI) from 3.3 to 4.8). Eleven large corps or infantry divisions – so defined by having had 2,500 or more tests in 2003 – accounted for 48,263 tests and 392 positives (8.1 per 1,000). Smaller units – including headquarters – accounted for 15,984 tests and 70 positives (4.4 positives per 1,000 tests: 95 per cent CI from 3.4 to 5.4). The CDT positive rate was highly variable across the 11 large corps or divisions ($\chi^2 = 205.4$ on 10 degrees of freedom) with markedly low rates in the Royal Signals (18/6,025), Royal Engineers (27/6,214), Royal Electrical and Mechanical Engineers (14/3,178) and Royal Artillery (31/6,169: 5.0 positives per 1,000 tests) but the

highest observed rates were for the King's (72/4,305: 16.7 positives per 1,000 tests) and Scottish (72/2,868) divisions.

Table 1 gives summary data for 2001-2005 on CDT in the British Army when the number of personnel tested averaged 88,407 a year. Overall, the CDT positive rate in 2001-05 for army personnel was 7.0 positive testees per 1,000 personnel tested, but there has been significant heterogeneity across the years ($\chi^2 = 71.0$ on 4 degrees of freedom), including the notably high CDT positive rate in 2005. The final column in Table 1 shows the CDT outcome for 2006, when the inferred rate for the British Army was 7.8 positive

testees per 1,000 personnel tested (and 8.5 positives per 1,000 tests).

Prior to the late Lord Garden's inquiry in April 2007 about which drugs or combination thereof military personnel had tested positive for in 2006,⁷ the only recent year for which substance-specific positive tests were given in answer to a parliamentary question was apparently 2003, when 517 personnel had tested positive for 580 substances. Actual combinations in 2003 were not elicited, but the overall rate of testing positive for two or more substances was clearly low, being, at most, 12 per cent (580/517 = 1.12). Cannabis accounted for half of all CDT positive test results in 2003, ecstasy for 20 per cent and cocaine for 22 per cent, but heroin for only 4/580 positives

(0.7 per cent). Like heroin, cocaine has a short urinary half-life.

By 2006, when 769 personnel tested positive for 891 substances (891/769 = 1.16), 660 were positive for a single substance (221 for cannabis only, 73 for ecstasy only, but 340 for cocaine only), see final column in Table 1; and 109 (14 per cent) for two or more substances – including 10 for ecstasy and cannabis.

Societal context is given by the declared 'drug use in the last month' of respondents to the British Crime Survey. The British Crime Survey has been boosted to have now some 6,000 respondents aged 16-24 years, albeit still with rather less than 50 per cent statistical power to discern a one-sixth year-on-year change in self-reported use

in the last month such as from 3 per cent to 2.5 per cent.⁸ Declared use in the last month by 16-24 year olds of cannabis decreased significantly, by a fifth, between 2003/04 (from 15.8 per cent) and 2005/06 to 2006/07 (13.0 and 12.0 per cent)⁹ as reproduced in the lower central panel of Table 1. Cocaine and ecstasy use in the last month were declared by similar proportions (2.8 and 2.6 per cent) of 16-24 year old respondents in 2003/04, by 3.0 and 2.0 per cent respectively in 2005/06, and by 3.2 and 2.5 per cent in 2006/07. Neither change was statistically significant.

As in outside communities, cannabis test positive rates for military personnel decreased modestly, by 14 per cent, between 2003 and 2006 ($\chi^2 = 3.19$ on 1

Table 2: Three semesters of compulsory drugs testing in the British Army, January 2006 to June 2007

Test period	Jan to June 2006	July to Dec 2006	Jan to June 2007	Proportion of positives who tested positive for a specific drug
Cocaine only	185	179	206	570
Cocaine plus	48	44	36	
Any Cocaine ^{PM} (% all positives)	233 (52%)	223 (58%)	242 (58%)	698 (55.7%) 95% CI: 52.9 – 58.4% Homogeneity: χ^2 (2) = 2.0
Ecstasy only	31	46	50	127
Ecstasy plus	27	42	26	
Any Ecstasy ^{PM} (% all positives)	58 (13%)	88 (23%)	76 (18%)	222 (17.7%) 95% CI: 15.6 – 19.8% Heterogeneity: χ^2 (2) = 11.7
Cannabis only	162	91	106	359
Cannabis plus	42	29	20	
Any Cannabis ^{PM} (% all positives)	204 (45%)	120 (31%)	126 (30%)	450 (35.9%) 95% CI: 33.2 – 38.5% Heterogeneity: χ^2 (2) = 26.8
Other	11	10	13	
Positive ^{NH PM}	451	386	417	1254
Tests ^{NH}	58,554	45,945	42,767	147,266
Number positive per 1000 tests	7.7	8.4	9.8	8.5
Cocaine positive rate ^{PM} per 1000 tests	4.0 95% CI: 3.5 – 4.5	4.9 95% CI: 4.2 – 5.5	5.7 95% CI: 4.9 – 6.4	4.7

NH: Derek Twigg in response to Nick Harvey, see House of Commons Hansard

Written Answers for 23 October 2007, column 170W

PM: Derek Twigg in response to Patrick Mercer, see House of Commons Hansard Written Answers for 29 October 2007, column 117 and PQ reference PQ04271T.

degree of freedom, $p = 0.074$) but the ecstasy rate remained at 1.3 positives per 1,000 tests. However, by far the most dramatic change in substance-specific positive test rates for army personnel was the markedly increased cocaine positive rate: up from 1.4 to 4.0 cocaine positives per 1,000 tests by 2006, and wholly disproportionate to modest changes in declared use in the last month in the outside community, as reflected by the British Crime Survey up to March 2007.

For the British Army, Table 2 compares the cocaine positive rate in CDT during the most recent three semesters: January to June 2006, July to December 2006, and January to June 2007. Substantially up on 2003, cocaine positive rate was 456/104,499 tests, or 4.4 per 1,000 tests in 2006 (95 per cent CI: 4.0 to 4.8) but rose again significantly in the first six months of 2007 to 5.7 per 1,000 tests (95 per cent CI: 4.9 to 6.4).

Notice that there are slight discrepancies between Tables 1 and 2 which are minor except for the 2006 results on testing positive for cannabis, on which Table 1 may be more reliable. Table 2 suggests that the proportion of positive samples which tested positive for cannabis decreased from 45 per cent in the first semester to 30 per cent in the more recent two. By contrast, the proportion of positives who had recently used ecstasy increased in the later two semesters. Soldiers' drug use may have shifted away from cannabis partly to minimize their chance of testing positive in CDT.

Issues

The British Army's substance-specific positive rates in 2003/04 were lower by a factor of twenty or more than corresponding rates of declared use in the last month by 16-24 year old respondents in the British Crime Survey.

Declared use in the last month is the most relevant comparator with the outside community because whether an individual soldier (or prisoner) tests positive in CDT depends on the illegal substance, the number of uses of it per month, and the elapsed time since last use of the drug tested for. Initially, drugs

testing of prisoners did not operate at weekends and so, by organizing their infrequent heroin use prior to weekends, prisoners' heroin positive rates in random mandatory drugs testing underestimated, by a factor of two to three, their non-attributable, self-reported, inside-use of heroin.¹⁰

Heroin use is rarely detected in the British Army. Cocaine is now detected in 0.4 to 0.6 per cent of tests. Like heroin, cocaine remains in the urine for only two to three days. The British Army's substantially increased urinary cocaine positive rate – up from 1.4/1,000 in 2003 to 4.0/1,000 and 5.7/1,000 in the first semesters of 2006 and 2007 respectively (up to a 4-fold increase) – could be accounted for simply by subtle changes in test practice, such as testing immediately after weekends. Such a change could itself discover three times more cocaine positives without there having been any alteration in underlying use of cocaine by service personnel, if their use of cocaine is infrequent, sporadic, but primarily on home leave or at weekends.

If, however, there has been no recent change in test practice, then the cocaine positive findings are genuinely concerning. Why so? Because the 4.0 to 5.7/1,000 urinary cocaine test positive rate could mask a two to three times higher, sporadic cocaine user rate, if infrequent use is primarily at weekends and testing is *not* specifically targeted on Mondays.

Since 1996, military personnel who use drugs may increasingly have adapted their drug(s) of choice to evade testing positive in CDT. There is uncertainty about how long ecstasy actually stays in the urine after use, but probably two to four days,¹¹ so that some increase in ecstasy test positive rate could be a consequence of a changed weekday pattern of testing, or of some switching from cannabis.

Cocaine, a seriously harmful drug¹² which stays in the urine for a relatively short time, is an irrational and costly, albeit fashionable, choice for service personnel to make. Cocaine's addictive potential will undoubtedly compromise the abilities of a proportion of its users, who – by dependency – put at risk their

professional competence, and thereby others.

Despite historical media coverage to the contrary, ecstasy is remarkable for its low level of harms, including lethality, as recently confirmed.¹³ There is, however, uncertainty about how long ecstasy stays in the urine, not least because of high person-to-person variation. It would be a public health service to military (and other) personnel to find out more because, if typically short, those who seek an evasion tactic could be diverted from cocaine to a much less harmful drug of evasion. Ecstasy ranks considerably lower than cannabis on the rational index of harms recently published by Nutt et al. in which cocaine comes close behind heroin; and both alcohol and smoking are well ahead of cannabis. For many years, according to Fairweather, alcohol was the main crutch for alleviating the pressures of military service.¹⁴

Military personnel take calculated risks as part of their professional lives. Their calculation about the risk of testing positive in CDT, and ministerial as well as public health scientists' interpretation of the ongoing hike in soldiers' cocaine positive rate is severely handicapped by the government's refusal (on grounds of cost) to disclose key data. The missing data are: the weekday of obtaining the urine for samples that a) test positive for cocaine; b) test positive for ecstasy; and c) test positive for cannabis. For comparison, ideally, one would wish to know also the weekday distribution for all obtained urine samples.

These are critical data properly to interpret an apparently alarming rise in the British Army's cocaine positive rate. The need for these data is the greater because the MoD study into the reasons that soldiers who tested positive had taken specific drugs (due to have been completed by May 2007) has also not yet been released into the public domain.

Unless the CDT pattern by weekday has shifted further between 2006 and January to June 2007, it is doubtful that it can be the whole story behind the continued rise in cocaine positive rate.

Most military personnel who test positive for drugs are discharged from

the British Army irrespective of which illegal drug was misused. Future employment prospects are blighted by the flagging of drug use as the reason for their discharge. The cost to the British Army of these discharges is nearly the equivalent of one battalion a year,¹⁵ and higher than the wars in Iraq and Afghanistan claim in fatalities¹⁶ and serious non-fatal casualties. Any recourse to illegal drugs to counter combat stress may also mean that, disproportionately often, drug-discharged service personnel will have mental health problems that emerge in the short or longer term. Longer-term follow-up of drug-discharged service personnel may be warranted.

Repeated tours of duty in Iraq and Afghanistan where, in 2006 and 2007, fatality rates exceeded or matched¹⁷ those during the initial phase of major combat in Iraq in 2003, may have contributed to the markedly increased CDT positive rates of around 9/1,000 among army personnel in 2005, 2006 and the first semester of 2007 but, if so, then cannabis, not cocaine, would be a surer exit route – unless soldiers can predict when the CDT teams are most likely to arrive, which is doubtful.¹⁸

The Directorate of Army Personnel Strategy began a twelve-month study in April 2006 to examine the factors which led to drug use by soldiers who tested positive for drugs [Watson in answer to Harper: 70146; Twigg in answer to Mercer: 157337, 16 October 2007]. Ideally, a stratified case-controls design will have been adopted, to take account of the huge heterogeneity that was evident in 2003 in the CDT positive rate between training units, large corps or infantry divisions, and smaller units.

With explanations imminent, and new evidence on rationally assessing the harm of drugs of potential misuse, the British Army should now consider whether the misdemeanours of ecstasy

and cannabis use warrant the severe penalty of dismissal, provided that neither cannabis dependency nor mental health problems are entailed. In the light of recent evidence,¹⁹ the harshest and least rational outcome would seem to have befallen military personnel who were dismissed the service for having been CDT positive for ecstasy alone. In 2006, 73 of the 769 personnel in the British Army who tested positive for drugs were positive for ecstasy alone, and 221 for cannabis alone. Service personnel rendered (temporarily) incapable of performing their duties by alcohol face a range of sanctions, but most are less severe than dismissal.

Should re-examination of military sanctions for illegal drugs use be a *cause célèbre* on four competing military grounds: justice, rationality, operational competence, and costs? ■

Conflicts of interest: SMB has made donations to Combat Stress.

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NOTES

- 1 The Army Rumour Service, 'A Balkans Mobilisation Story III – Flying the desk solo' (April 10, 2007), <<http://www.arrse.co.uk/cpgn2/Blogs/mode=display/id=321/html>> accessed 26 April 2007
- 2 Sheila M Gore and Graham A Bird, 'Mandatory drug tests in prisons' in *British Medical Journal* (310, 1995), p. 595.
- 3 David Nutt, Leslie A King, William Saulsbury and Colin Blakemore, 'Development of a rational scale to assess the harm of drugs of potential misuse' in *Lancet* (369, 2007), pp. 1047-1053; Brian Brady, 'Revealed: hard drug culture among soldiers' in *Scotland on Sunday* 21 May 2006; Lorna Martin, 'Drug-taking troops provoke army crisis. Zero tolerance leads to 800 expulsions a year and worsens troops shortage' in *The Observer* 25 March 2007; Ian Bruce, 'Class A drug abuse among armed forces is still rising' in *The Herald* 20 April 2007
- 4 Sheila M Gore and Drugs Survey Investigators' Consortium, 'More effective monitoring needed

of young people's use of illegal drugs: meta-analysis of UK trends' in *British Journal of Criminology* (39, 1999), pp 575 - 584. Stephen Roe and Louise Man, 'Drug Misuse Declared: Findings from the 2005/06 British Crime Survey. England and Wales' in *Home Office Statistical Bulletin* (15:06, October 2006)

- 5 Graham A Bird, Sheila M Gore, Sharon J Hutchinson, Stephanie C Lewis, Sheila Cameron and Sheila Burns, 'Harm reduction measures and injecting inside prison versus mandatory drugs testing: results of a cross sectional anonymous questionnaire survey' in *British Medical Journal* (315, 1997), pp 1- 24
- 6 Sheila M Gore, Graham A Bird and John S Strang, 'Random Mandatory Drugs Testing of prisoners: a biased means of gathering information' in *Journal of Epidemiology and Biostatistics* (4, 1999), pp 3-9. Nicola Singleton, Elizabeth Pendry, Tracey Simpson, Eileen Goddard, Michael Farrell, John Marsden and Colin Taylor, *The Impact of Mandatory Drug Testing in Prisons*, Home Office Online Report (03/05, 2005). Sheila M Bird, 'Random mandatory drugs testing of prisoners' in *Lancet* (365, 2005), pp. 1451-1452
- 7 Ian Bruce, *op. cit.*
- 8 Sheila M Gore and Drugs Survey Investigators' Consortium, *op. cit.*; Murphy and Roe, *op. cit.*
- 9 Murphy and Roe, *op. cit.*
- 10 Bird, Gore, Hutchinson, Lewis, Cameron and Burns, *op. cit.*; Gore, Bird and Strang, *op. cit.*; Singleton, Pendry, Simpson, Goddard, Farrell, Marsden and Taylor, *op. cit.*; Bird *op. cit.* pp 1451-1452.
- 11 Darryl Inaba and William E Cohen, Uppers, Downers, All Rounders: Physical and Mental Effects of Psychoactive Drugs 6th edition (CNS Productions, Ashland USA, July 2007).
- 12 Nutt, King, Saulsbury and Blakemore, *op. cit.*
- 13 *Ibid.*
- 14 Roe and Man, *op. cit.*
- 15 Bruce, *op. cit.*
- 16 Sheila M Bird and Clive B Fairweather, 'Military fatality rates (by cause) in Afghanistan and Iraq: a measure of hostilities', *International Journal of Epidemiology* 2007; 36(4): 841-846.
- 17 *Ibid.*
- 18 The Army Rumour Service, *op. cit.*
- 19 Nutt, King, Saulsbury and Blakemore, *op. cit.*

Is It Time for the MoD to Review its Drug Policy?

A Response to Professor Bird's Findings*

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Drug abuse in the Armed Forces is a live issue at present, with the Ministry of Defence (MoD) confirming on 13 November 2007 that seventeen soldiers from the 5th Battalion The Royal Regiment of Scotland (Argyll and Sutherland Highlanders) tested positive for illegal substances after a rest and relaxation period in Cancun, Mexico following an exercise in Belize.¹ Professor Bird's paper is therefore timely, and her analysis suggests that there could be merit in the MoD re-evaluating its current approach to managing drug abuse in the Services.

It is important to stress that drug misuse in the Armed Forces as a whole involves relatively low numbers of personnel and is confined almost exclusively to occasional recreational rather than habitual use. In 2005, the overall strength of the Services stood at 201,100.² 66,197 individuals in the Army were tested, of whom 795 were positive, giving a positive test rate of 1.2 per cent.³ Drug misuse appears to be less of a problem in the Royal Navy and Royal Air Force with positive test rates of 0.36 per cent and 0.16 per cent respectively in 2005. By way of external comparison, the MoD recently stated that positive drug test rates in the Army over the last four years average around 0.7 per cent compared with over 7 per cent in civilian workplace drug testing programmes in the UK.⁴

Compulsory drugs testing (CDT) is carried out within all three Services, having been introduced fully in the Army on 2 May 1995, in the RN on 1 April 1997 and in the RAF on 1 November 1998.⁵ All three Services maintain a near zero tolerance policy with the vast majority of those personnel who test positive

being discharged. However, Army Queen's Regulation 5.089⁶ allows very occasional exceptions to be made where young first offenders, at or below the rank of corporal, who are found guilty of non-class-A drug offences, are given an opportunity to continue their service after a period of education, behavioural therapy, assessment, advice and counselling on an Early Intervention Programme. The RAF pursues a similar line, stating in *Air Publication 1: Ethos, Core Values and Standards of the Royal Air Force* that 'Our policy for those who commit drug related offences is based on dismissal from the Service unless there are significant extenuating or mitigating circumstances.' Interestingly, the RN is the only Service which goes so far as to state that it has a zero tolerance policy,⁸ although it may well be that a more pragmatic approach is adopted in reality.

The Early Intervention Programme (Drugs) is a tri-Service programme (although the majority of participants are from the Army) and enjoys an excellent success rate with only 10 per cent of programme participants caught re-offending before their period of service ends.⁹ Those who are caught still have a range of punitive measures taken against them, in addition to having to attend the programme: if a Lance Corporal or above, he or she will be demoted; future promotion may be barred for a period; and the individual can expect to be tested on every CDT team visit. Provided that an individual is successfully re-educated, once any additional sanctions have been lifted there is no bar to their extending their period of engagement and enjoying a full career with promotions along the way as appropriate. Notwithstanding the

success of the programme, there are some compelling reasons for the MoD to maintain its 'near zero' tolerance policy.

First, it undoubtedly has a strong deterrent effect; if the policy is unambiguous, individuals will know the likely consequences of making a decision to take drugs. A dishonourable discharge for drugs-related offences not only brings to an end one's military career but may also make securing subsequent civilian employment more problematic. This acts as a disincentive to those who might be considering this path as a means of securing a quick exit from service. Any relaxation of drugs policy, for example to stop dismissing personnel for class-C drug use, would possibly not only undermine the deterrent effect but would also require resources to be devoted to putting appropriate processes in place to monitor individuals to ensure occasional use did not become habitual use.

Secondly, there is the issue of operational effectiveness, both at the individual and collective level. Every soldier must be fit to carry out his or her duties but drug abuse, particularly when occurring over an extended period of time, can cause both physical and mental health problems which damage personal professional competence. The Army, indeed all of the Armed Forces, rely heavily on teamwork to be able to deliver against their objectives and if a serviceman or servicewoman is found to be taking drugs, that individual is likely to lose the respect and trust of his or her colleagues. This can lead to a breakdown in team cohesion which, in turn, can degrade collective operational effectiveness. The immediate removal of soldiers caught offending under the zero tolerance policy seeks to prevent such damage occurring. But the starkest impact on operational effectiveness would occur if personnel on operational deployments were taking drugs. If Professor Bird's suggestion that operational pressures could make drug-taking more likely, and if drugs are available in theatre (as is the case in both Afghanistan and Iraq), then there is the chance that some could be taking drugs during operations.

Thirdly, the wider security risk must be considered. In the process of acquiring

illegal drugs, an individual must fraternize with criminals. In doing so, they make themselves vulnerable to both violence and blackmail; the latter could have implications for national security. Moreover, there is a strong link between drugs and crime and therefore there is a possibility that these young soldiers may be drawn into other criminal activities.

Having considered some of the reasons why the MoD should maintain a hard line on drugs, we should examine some of the matters arising from Professor Bird's analysis which indicate that a different strategy might be required. The increase in positive CDT results since 2005 requires further analysis to establish whether it signifies a real increase in drug use or is attributable to changes in the testing regime. The Professor advises that alterations to the weekday pattern of testing could account for the change. Equally, a move from random to selective profiling of the target testing population, and the use of more sensitive tests for specific substances could also explain an increase in the positive rate without there having been any underlying change in the prevalence of soldiers' drug-taking. However, if there has been genuine growth in drugs use, we must ask why. Professor Bird suggests that the increase could be linked to repeated tours of duty in Iraq and Afghanistan, the implication being that combat stress is a contributing factor. If such a link is proven, the ramifications for the MoD could be significant, as there will be a strong moral argument for adopting a more compassionate approach.

The issue of an increasing number of drug-related discharges at a time when recruitment and retention are problematic also needs to be examined more closely. Although there is no clear evidence of a recruitment and retention 'crisis' in the Armed Forces at present, with all three Services currently outside manning balance¹⁰ and harmony guidelines¹¹ being consistently exceeded, there is real concern that retention may become an issue.¹² On the recruitment front, there are some trades considered 'difficult to recruit' and for the Army these include the Infantry and Royal Artillery where there were shortfalls

against recruiting targets of 17 per cent and 27 per cent respectively in 2005.¹³ However, the figures that Professor Bird refers to from 2003 show that the highest observed positive rates were for the (then) King's Division and the (then) Scottish Division. If the high positive rates for 2003 continue to be representative of the infantry divisions, then there could be a need to look at a more pragmatic management strategy so that the recruitment difficulties are not compounded by high discharge rates resulting from drugs offences.¹⁴

The harsh reality is that the majority of recruits joining the infantry regiments have limited basic skills and low academic achievement levels, with an increased likelihood that they come from broken families and have been raised in deprived areas where they may have had exposure to the drugs scene from a relatively early age. Typically, these young people are outgoing, gregarious and thrill-seeking, traits which are desirable in a soldier but which could also make them more likely to engage in illicit drug-taking.

When an individual is discharged, the Army not only incurs the cost of recruiting and training a replacement but also suffers from a concomitant loss of experience; even the relatively young soldiers who are likely to be lost due to drug misuse have valuable know-how, many in testing operational theatres. The loss of knowledgeable personnel can significantly degrade a unit's operational effectiveness, with the impact rising in line with rank. However, the economic costs of discharges due to drugs offences, and the degradation in operational effectiveness resulting from manning shortages, have to be evaluated against a number of issues: the potential costs of degradation in operational effectiveness caused by loss of individual competence or breakdown in unit cohesion; the potential threat to security; and the loss of the deterrent effect if the zero tolerance policy were to be reversed. All of these are difficult to quantify. It would be instructive to examine the personnel casework records closely to try to determine how many individuals discharged are those who the Armed Forces would have wished to retain; there is the possibility that those found guilty of

drug offences may have poor disciplinary records and may lack other characteristics valuable to the Armed Forces. In those cases, their departure would be no great loss to their Service.

One of the most worrying trends identified in Professor Bird's analysis, and one which is acknowledged by the Army, is the increase in numbers of personnel testing positive for cocaine. Professor Bird does not find a statistical link to support the suggestion that such an increase could be a reflection of society at large but a recent DrugScope survey, *Drug Trends 2007*,¹⁵ showed that the UK market for cocaine is expanding with the drug being more affordable than ever before. The survey uncovered a 'two-tier' market for cocaine with 'luxury' and 'economy' varieties, the latter being more heavily cut with other compounds (such as paracetamol, caffeine, lactose and other sugars) and therefore cheaper. DrugScope acknowledges that the official statistics show that cocaine use has been relatively stable since 2000¹⁶ but suggests that the feedback from its survey indicates that cocaine use among young people may be growing. If this is the case, it might explain in part the increase in cocaine positives in the Army, the majority of whom fall into the 16-24 age group. However, it would be too simplistic to suggest that any trend could be the result simply of a decrease in price and an increase in availability. There are undoubtedly other issues at play all of which need to be fully investigated; cocaine is an extremely harmful drug so an increase in its use among military personnel will be of grave concern to the MoD.

Professor Bird suggests that perhaps there is a case for the severity of the punishment meted out to offending soldiers to be related to the harmfulness of the substance for which they tested positive. The rational scale of harm devised by Professor Nutt *et al.* (and referred to by Professor Bird) received much coverage in the national press last year, as it rated alcohol and tobacco as being more harmful than cannabis and ecstasy. Many would argue that alcohol and tobacco are legal whereas recreational drugs are not and therefore should be managed differently, as the

Armed Forces should not be seen to be implicitly condoning criminal behaviour by failing to take a hard line on drugs. However, committing other civil offences does not automatically lead to discharge from the military; indeed, those found guilty of fairly serious offences such as drink-driving rarely face summary dismissal as a result of their conviction. Despite the fact that alcohol is rated as more harmful than cannabis and ecstasy, its use is widespread in the Armed Forces and it is an accepted, if not *expected*, element of military culture. The biggest threat to operational effectiveness may well not come from drugs but from alcohol, both long-term (as in alcoholism and its related conditions), and short-term (as in hangover-induced loss of effectiveness). Yet the Armed Forces pursue a far more compassionate approach to personnel with alcohol problems than they do to those testing positive for the comparatively less harmful cannabis. Moreover, drinking throughout the week is considered acceptable whereas much drug misuse occurs at weekends or on extended leave periods when individuals return to their home towns and their old friends.

The hard line policy on drugs has served the MoD well to-date. CDT exists to deter rather than to try to catch every single person who might engage in occasional drug use and it appears to have acted as an effective deterrent to date. It also helps to maintain operational effectiveness and reduce possible security risks. However, the recent increase in positive test results, the more stressful nature of today's military operations, the manning shortfalls, the possibility of future retention problems and the difficulty of recruiting to certain trades are good reasons for re-examining the present policy. The MoD needs to be sure that its near zero tolerance approach still constitutes the best way of managing the problem of drug abuse in the Armed Forces. ■

NOTES

*Sheila Bird, 'Compulsory Drugs Testing in the British Army: Assessing the Data', in *RUSI Journal* (Vol. 152, No. 6, 2007)

- 1 <<http://www.blogs.mod.uk/>> accessed 16 November 2007.
- 2 <<http://www.dasa.mod.uk/natstats/ukds/2005/c2/table27.html>> accessed 25 November 2007.
- 3 Ministry of Defence, 'Drugs in the Armed Forces (FOI)', <http://www.mod.uk/NR/rdonlyres/FE15F1E4-4C6B-4CD2-9803-A2D612B81506/0/drugs_armedforces.pdf> accessed 19 November 2007.
- 4 <<http://www.blogs.mod.uk/>> accessed 16 November 2007. Data provided by LGC, the laboratory which has carried out the MoD's CDT analysis since 1995.
- 5 Hansard, (11 April 2000), Column: 94W, <<http://www.publications.parliament.uk/pa/cm199900/cmhansrd/vo000411/text/00411w04.htm>> accessed 16 November 2007.
- 6 The Queen's Regulations for the Army 1975 (incl. Amendment 27) <http://www.army.mod.uk/linkedfiles/servingsoldier/termsofserv/discmillaw/ref/queens_regulations_incl_a27.pdf> accessed 16 November 2007.
- 7 <http://www.raf.mod.uk/rafcms/mediafiles/6D73F7B6_C68B_1D40_E56AD9B0BDDFF8C53.pdf> accessed 16 November 2007.
- 8 <<http://www.royal-navy.mod.uk/server/show/conWebDoc.1912>> accessed 16 November 2007
- 9 Information provided by SO2d PS2 (A) at Upavon who runs the EIP(Drugs) Programme.
- 10 Manning balance is defined as between 2 per cent below and 1 per cent above the required trained strength of the service; as at 1 October 2007, the shortfall between trained strength and trained requirement across all three services was 6,730. Defence Analytical Services Agency, TSP04 <<http://www.dasa.mod.uk/natstats/tsp4/tsp4tab1.html>> accessed 26 November 2007).
- 11 Each service has harmony guidelines which lay down the amount of time that it is acceptable for service personnel to spend away from their families and the intervals that units should enjoy between operational tours.
- 12 House of Commons Committee of Public Accounts, 'Recruitment and Retention in the Armed Forces', Thirty-Fourth Report of Session 2006-07.
- 13 National Audit Office, 'Recruitment and Retention in the Armed Forces', 3 November 2006.
- 14 Hansard, (22 March 2004), Column 547W
- 15 <<http://www.drugscope.org.uk/ourwork/pressoffice/pressreleases/drugscope-street-drug-survey.htm>>.
- 16 The Home Office, *Drug Misuse Declared: Findings from the British Crime Survey 2005/06*.

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An ISAF helicopter flies over Afghans
gathering at the site of a car bomb in
Kabul. *Photo © Reuters*

- 3 Foreword
- 4 Letters

**Counter-Insurgency in Global
Perspective**

- 6 Introduction: Politicians Need to
Understand Insurgency
John Mackinlay
- 8 British Counter-Insurgency from
Malaya to Iraq
Hew Strachan
- 12 Learning, Adapting, Applying:
US Counter-Insurgency Doctrine
and Practice
Alexander Alderson
- 22 Who dares, Loses? Rhodesia's
Counter-Insurgency Experience.
Greg Mills & Grahame Wilson

Energy Security

- 32 Old Interests New
Interdependencies – The Increasing
Strategic Importance of Energy
Pipelines
Tobias Feakin
- 36 Keeping Iraq's Life Blood Flowing –
Protecting the Offshore Oil
Terminals
Wayne Keble

Studying War

- 42 What is War? Some Reflections on
a Contested Concept
Jeremy Black
- 46 From Gulf War to Global War on
Terror: A distorted Sun Tzu in US
strategic thinking?
Charles Chao Rong Phua

Drug Use in the Military

- 54 Compulsory Drugs Testing in the
British Army: Assessing the Data
Sheila M. Bird
- 60 Is it time for the MoD to Review its
Drugs Policy? A Response to
Professor Bird's Findings
Christianne Tipping

Economics of Defence

- 64 Military's Economic Role and
Beyond
Ayesha Siddiqi
- 72 Some further thoughts on
addressing 'Wicked problems'
Andrew Cranfield

Military History

- 76 The Evolution of the Division in
British Military History
Ashley Jackson
- 82 Blitzkrieg: Revolution or Evolution?
Weichong Ong
- 88 From War Graves to an Onion
Bread Festival: Can Military
Archaeology Promote Peace?
**Andy Robertshaw &
David Kenyon**

Reviews

- 94 Ghost Stories
John Nagl
- 96 Hollywood's Take on the 'War on
Terror'
Frank Gardner
- 99 Book Reviews by **Michael Clarke,
Barry Paskins and
Beatrice Heuser**