radiation dose and risk of genetic abnormalities observed in subsequent pregnancies.^{6 7}

Patients with young children at home should be advised to avoid prolonged daily close contact (within less than 1 metre) with them for a time dependent on the dose of radioiodine to be administered. The inconvenience or impracticality of this requirement often deters many patients from having treatment.

Long term follow-up data show no increased risk of cancer after radioiodine therapy and, contrary to some patients' misconception, there is no overall excess mortality from cancer.^{8 9} Some studies have highlighted a small increased risk of thyroid cancer, but the increased absolute risk is very small—in about 7500 patients treated with radioiodine nine cases of thyroid cancer were observed compared with 2.8 expected.^{8 10}

The only recognised long term adverse effect of radioiodine therapy is hypothyroidism, so all patients are warned that they might need lifelong thyroxine replacement. The rate at which hypothyroidism develops depends on the dose of radioiodine. Current evidence says that best practice is to give higher doses of ¹³¹I to render patients hypothyroid more quickly, given the observed increased all cause mortality in hyperthyroid patients treated with radioiodine (in about 105 000 person years of follow-up, 3611 deaths were observed compared with 3186 expected).¹¹ This increased mortality is no longer seen, however, once patients are hypothyroid and receiving replacement therapy.¹²

Patients are advised to avoid public transport for two weeks so that they do not expose nearby passengers to radioactivity but, to date, advice regarding air travel and radiation detectors has been overlooked in many centres. It is not possible to devise prescriptive guidelines to clearly define the period during which patients may activate security alarms at airports. Despite the constant biological half life of ¹³¹I (eight days), its effective half life varies widely with the patient's renal function. Furthermore, anecdotes of patients who have travelled to eastern Europe without incident after radioiodine therapy, only to activate a security alarm on entering the United States two weeks later, suggest that different detectors are set at different radioactive thresholds. Not surprisingly, the British

Airports Authority was unwilling to give any information regarding the sensitivity of their detectors when we approached it for clarification.

The only practical solution must be to adequately counsel anyone receiving radioiodine (or indeed any radioisotope) about travelling overseas and advise them to carry their radiation certificates. To prevent the alarm bells ringing, this practical advice should be incorporated into the new guidelines on the use of radioiodine for thyroid disease that are to be published later this year by the Royal College of Physicians.

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Classification of illegal and harmful drugs

The UK's confusing and inadequate ABC system is ready for an urgent overhaul

This week the House of Commons Select Committee on Science and Technology published the report of its inquiry on the classification of illegal drugs in the United Kingdom.¹ The report highlighted glaring anomalies in the classification of illegal drugs into classes A, B, and C and reflected a broad agreement that the current system is not fit for purpose. The committee also reported considerable confusion over the remit of the Advisory Council on the Misuse of Drugs and serious flaws in the way that the council conducts its business.

The select committee's report criticises the government for failing to meet its commitments to evidence

based policy making. Indeed, the inquiry on illegal drugs was part of a wider investigation into how the UK government handles scientific advice, risk, and evidence. Launching the whole inquiry last November, the committee chairman, Phil Willis MP, said "We keep hearing from government ministers that policy is based on evidence. We want to... (know what that) means in practice."

The classification system (based on the United Nations Single Convention, 1971, and the Misuse of Drugs Act, 1971) was designed as a way to control the use of illegal drugs according to their relative harmfulness (table).² The Misuse of Drugs Act created the

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Current classification of harmful drugs in United Kingdom

Classification	Drugs	Maximum penalties
Class A	Heroin, lysergide (LSD), ecstasy, amphetamines (prepared for injection), cocaine, crack cocaine, magic mushrooms	For possession: 7 years' imprisonment or a fine (or both); for supply: life imprisonment or a fine (or both)
Class B	Amphetamines, methamphetamine, barbiturates, codeine	For possession: 5 years' imprisonment or a fine (or both); for supply: 14 years' imprisonment or a fine (or both)
Class C	Cannabis, temazepam, anabolic steroids, valium, ketamine, methylphenidate (Ritalin), γ -hydroxy butyrate (GHB)	For possession: 2 years' imprisonment or a fine (or both); for supply: 14 years' imprisonment or a fine (or both)

Advisory Council on the Misuse of Drugs to oversee the system.

Although classification is based on the concept of harm, this term is not defined. When the inquiry on illegal drugs began, the then Home Secretary Charles Clarke repeatedly asserted that "clinical, medical harm is the ... predominant consideration." But the chairman of the advisory council contradicted this, stating that social and medical harms were given equal weight.

The government has handled the classification of specific drugs inconsistently. Despite the many harms associated with use of tobacco and misuse of alcohol, these two substances are not covered by the classification system and the committee now recommends that they should be.

After a long running debate about the classification of cannabis, and at the request of the then Home Secretary David Blunkett, the advisory council recommended in 2002 that cannabis should be reclassified from class B to class C. This recommendation was accepted with effect from January 2004.

In contrast, in July 2005 the government reclassified magic mushrooms as class A drugs. Sir Michael Rawlins, the chairman of the advisory council, told the committee "I have no idea what was going through the minds of the group who put it in class A."¹ The committee thought the council's failure to speak out against the government's placement of magic mushrooms in class A was complacent, damaging to the credibility of the council, and made the council look as though it endorsed the government's decision.¹

The classification of the drug ecstasy is equally controversial. Both the Runciman report in 2000³ and the Home Affairs Committee in 2002 suggested that ecstasy should be reclassified from class A to class B. These recommendations were rejected by the then Home Secretary David Blunkett on the grounds that reclassification would be "irresponsible."⁴

Ecstasy is used widely, with a reported prevalence in 2001-2 among 16-59 year olds in England and Wales of 6.8%, which made it the second most frequently used illegal drug after cannabis.⁵ Yet the advisory council has never reviewed the drug's class A status or voluntarily presented recommendations on the drug to the government. The select committee's report this week suggests that the advisory council should be more proactive in providing scientific advice on drugs policy.

The advisory council has also made inconsistent decisions on methamphetamine. In November 2005

the advisory council told the home secretary that there was no basis for reclassifying methamphetamine from class B to class A.⁶ In May 2006, after appearing before the Committee on Science and Technology and after a flurry of media reports about the drug's harms, the advisory council revised its position on methamphetamine and recommended moving it to class A. Did the council realise that it had made a mistake or did it succumb to outside pressure? Such an approach to policy making is opaque and could be seen as a knee jerk response to a media storm.

The select committee expressed surprise that the advisory council had never formally discussed the case for reviewing the classification system, and regarded its failure to alert the home secretary to its serious doubts about the system as a dereliction of duty.¹ As well as calling for a less confusing approach to the classification of drugs, the committee's report urges the government to increase considerably its investment in research on addiction to improve the evidence base. Current funding of research on addiction was described by Professor John Strang of the National Addiction Centre (an expert witness to the committee) as "an embarrassment"¹ and by the committee itself as "woefully inadequate."¹

One main purpose of classification of illegal drugs is to produce a deterrent effect by linking legal penalties to the harms associated with particular drugs. The committee found no evidence of any such effect. Furthermore, the committee recommends in its report that the government should uncouple classification on the basis of harm from the penalties for possession and trafficking of illegal drugs.

Other countries that have also signed the UN drug control treaties, such as the Netherlands, United States, and Sweden, have very different policies on drug legislation from those in the UK.⁷ The select committee concluded that the UN drug control treaties do not pose a major barrier to reform of the UK drug classification system and that the conventions allow more room for manoeuvre than is generally understood. It is clear that it is now time for that reform.

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Competing interests: MG was the specialist adviser on drugs to the select committee but was not a member of the committee and did not formulate its recommendations.

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