REASONS GIVEN IN DEFENCE OF TESTING

The reasons most frequently given for instituting random drug testing programmes are based on the argument that it is a good tool for controlling drug problems because it offers inmates a valid excuse to avoid either drug use or participation in drug trafficking, and it assists in protecting inmates' access to programmes and transfers to lower security prisons. It is claimed that random urine testing will result in the following:

- A decrease in drug use
- A decrease in the violence related to drug use
- A decrease in the violence associated with drug trafficking in institutions.

The validity of these claims regarding random urinanalysis programmes will now be examined.

DRUG TESTING METHODS AND INTERPRETATION OF TEST RESULTS*

Drug properties

Detection of a drug depends primarily on the absorption, distribution and elimination properties of the drug. The amount of drug stored depends on the quantity, duration of ingestion and
frequency of use. As there is a great deal of variation in the half-life of different drugs, and the absolute amount of drug present can be very small, it is crucial that the appropriate body fluid for analysis is selected for testing.

Urine testing

Urine is the preferred sample of choice because it is available in larger volumes than blood, contains the metabolite and requires less invasive procedures in its collection. The average periods for which metabolites are detectable in urine are shown in Table 1.

<table>
<thead>
<tr>
<th>DRUG</th>
<th>Detection period in urine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metamphetamine</td>
<td>2-3 days</td>
</tr>
<tr>
<td>Amphetamine (metabolite)</td>
<td></td>
</tr>
<tr>
<td>Heroin</td>
<td>Few minutes</td>
</tr>
<tr>
<td>Morphine (metabolite)</td>
<td>1-2 days</td>
</tr>
<tr>
<td>Phencyclidine</td>
<td>2-3 days</td>
</tr>
<tr>
<td>Cocaine</td>
<td>A few hours</td>
</tr>
<tr>
<td>Benzoylecgonine (metabolite)</td>
<td>days</td>
</tr>
<tr>
<td>Tetrahydrocannabinol</td>
<td>90% fall in 1 hour (blood)</td>
</tr>
<tr>
<td>Tetrahydrocannabinol acid</td>
<td>Depending on use, few days to many weeks</td>
</tr>
<tr>
<td>Alcohol (ethanol)</td>
<td>1.5 - 12 hours depending on peak blood level</td>
</tr>
</tbody>
</table>

Measuring impairment

The degree to which a person is influenced by a drug at the time of the test cannot be determined except in the case of alcohol. A positive urine test does not allow for determination of the form in which the drug was taken or when and how much was taken. Consumption of poppy seeds has been reported to give positive results for opiate use because some seeds have been contaminated with opium derivatives. The problem of interpreting urine test results is one of the major bases for restricting their use in employment and similar settings.

Methods

The methods most commonly used in toxicology laboratories are immunoassay, chromatographic and chromatography coupled with mass spectrometry. These methods vary
considerably with respect to their validity and reliability.

Immunoassays

These assays are used for preliminary screening, e.g. EMIT (enzyme multiplied immunoassay technique). As these methods are based on the antibody-antigen reaction, small amounts of the drug or metabolite(s) can be detected. Immunoassays are typically designed for a class of drugs. Thus, their specificity is not very good. For example, the immunoassay method for cannabinoids detects nonsteroidal anti-inflammatory drugs, ibuprofen and naproxen. Codeine will give a positive reaction for the morphine immunoassay, and many antihistamines available over the counter can give positive reactions for amphetamines. Immunoassays are considered good screening tests only if the initial positive is confirmed by a different method. The risk of labelling a person with a false positive is high without confirmatory analysis.

Gas chromatography-mass spectrometry (GCAMS)

This is a combination of two sophisticated technologies: gas chromatography (GC) and mass spectrometry (MS). GC physically separates the compound and MS fragments it so that a fingerprint of the chemical can be obtained. Although sample preparation is extensive, when the methods are used together the combination is regarded as the 'gold standard' by most authorities. This combination is sensitive, specific and can identify all types of drugs in any body fluid.

False positives

A false positive occurs when results show that the drug is present when, in fact, it is not. Some false positives are attributable to substances such as asthma or allergy medications. Some natural substances such as herbal teas and poppy seeds can give positive responses to screens; these may be true positives but need to be distinguished from those resulting from illicit drug use. False positives can also be caused by human error or sabotage; it is estimated...
that about 5% of urinalysis results are false positives as a result of a combination of human error, sabotage and adulteration.

**Adulteration methods**

Switching 'dirty' urine for 'clean' urine is the most common way to deceive a drug-screening test. Hiding condoms containing clean urine on the body or inside the vagina is one common method. Tubes may also be inserted into the urethra. People will add bleach, liquid soap and many other household products in attempts to mask drug use. One technique is to hide a masking substance under the fingernails. Another method is to poke a small hole into the container with a pin so that the sample leaks out by the time it reaches the lab. Many labs routinely test for contaminants because of adulteration.

**OBJECTIONS TO DRUG TESTING**

The primary objections to drug testing are as follows:

- Urinalysis cannot measure impairment or other behavioural effects of drugs.
- Drug testing programmes are very expensive.
- Urinalysis cannot determine precisely when the drug was used nor can it identify the quantity of the drug ingested.
- To be even reasonably sure of continuing drug free status, frequent re-testing would be needed this is very intrusive and very expensive.
- Drug testing is extremely intrusive of the right to privacy.
- Drug testing results in the collection of highly sensitive personal information; related test on urine may identify medical conditions, formerly known (or even unknown) to the person being tested.
- False positives do occur because tests detect legitimate drugs as well as certain foods (e.g. poppy seeds) and because of human error; it is estimated that the error rate for urinalysis programmes is about 10%, with half of these (5%) being false positives.
- Random drug testing programmes have an extremely negative impact on morale.
- People likely to be tested for the use of one substance (e.g. marijuana) may simply switch to a drug that is not tested for or that is less likely to be detected but which is more harmful than the original substance.
- Lack of procedural safeguards with respect to urinalysis.
- Random drug testing programmes and their consequences will result in a chronic underclass
of prisoners/parolees and unemployables.

- Drug testing programmes lead to a false sense of security - by focusing on illicit drugs, especially marijuana, the real causes of violence (prohibition, overcrowding, lack of exercise, boredom and despair) are overlooked. Drug testing gives the appearance of doing something without dealing with the real issues (drugs are a good scapegoat in modern society).

WILL A RANDOM URINALYSIS PROGRAMME HAVE THE DESIRED EFFECTS?

Will the programme reduce drug use?

A wide variety of drugs, including alcohol and tobacco, are available in prisons. As many inmates are sent to prison because of drug-related offences, and because many inmates report using drugs for the first time while in prison, it is reasonable to expect that levels of drug use in prisons would be quite high (there are no reliable data on this). It is also reasonable to predict that a random drug testing programme will result in a decrease of those drugs that it is most likely to detect. This means that drugs that are detectable through their metabolites in urine for a long time, such as marijuana (up to 30 days), will he given up in favour of those which are either not detectable at all by urinalysis (e.g. solvents and inhalants, designer drugs) or are only detectable for a short time (e.g. heroin and cocaine - a few days; alcohol - a few hours). In short, then, the programme is likely to reduce the use of marijuana and increase the use of alcohol and certain other drugs.

Will the programme reduce the violence related to drug use?

Before addressing this question, it should be pointed out that the question itself reflects a misunderstanding about the effects of drugs. Most drugs per se do not produce violent reactions. The effects of any drug are the interaction of the drug, the setting in which it is taken, and the psychological and physiological make-up of the person taking it. Some drugs, such as marijuana and heroin, are associated with relaxation and sleepiness in most people; others, such as cocaine and alcohol (to a point), produce excitement and exhilaration; still others, such as alcohol tend to be associated with socialisation and animation at lower doses, then aggression and finally stupefaction at higher doses. Violence results when there is a combination of circumstances, such as an aggressive person taking cocaine in an overcrowded or otherwise threatening situation.
Given the above, it is highly unlikely that the programme will reduce violence in prisons. Marijuana, the drug least likely to be associated with harmful effects, including aggressiveness, will be replaced by drugs such as alcohol and cocaine which are far more likely to be associated with behaviours related to aggression. It is possible that inmates will also turn to the use of solvents or inhalants, which are not detectable by the urinalysis programme, and these too can be associated with aggressive behaviour, either directly (because of their short-term effects) or indirectly (because, in the longer term, they produce brain damage).

Will the programme reduce the violence related to the drug trade?

It is important to note that, in prison, just as in the wider society, it is drug prohibition that causes violence and not the drugs or the drug trading per se. As long as highly desired commodities are prohibited, there will be territoriality and competition around their distribution. Just as the pattern of drug use is likely to change as the result of a random drug testing programme, so too is the nature of what is traded. The existing drug trade which includes a large proportion of marijuana will simply be replaced by increased trade in cocaine, heroin, LSD, designer drugs, solvents, tobacco and alcohol. It is therefore highly unlikely that the programme will have a marked effect on the violence associated with the drug trade.

COULD THE PROGRAMME INCREASE DRUG-RELATED HARMs?

A random urinalysis programme is likely to increase the use of more harmful drugs in more harmful ways. This is because users will turn from readily detectable but relatively benign drugs, such as marijuana, to the use of much more harmful substances such as alcohol (this is particularly harmful if it is homebrew, as is often the case in prisons). Such use will not only increase health risks for the user (including over doses from high-grade heroin), but will also be likely to increase levels of aggressiveness in the institutions. It is well worth noting that the implementation of random drug testing programmes in British prisons has been resisted by prison officers who have hinted at a preference for dealing with inmates who are rendered more relaxed and docile through the use of marijuana than those without such access.

As a result of the crack-down on drugs, users will be likely to turn to methods of use that are relatively undetectable. For example, users will be less likely to smoke a substance and will be more likely to inject it, thereby using discretely and getting the maximum effect from the drug. Injection increases the likelihood that drug users will be exposed to AIDS and hepatitis, rates of both being already high in prisons. As there is no access to clean syringes in prisons and
bleach is difficult to obtain or even prohibited in many, chances of infection are high. A drug-testing programme will also have negative consequences in that it will lower the morale of inmates and produce an increased level of mistrust and alienation between staff and inmates.

ARE THERE OTHER WAYS TO ACHIEVE THE DESIRED RESULTS?

Recognising that the central concern in institutions is to strike a balance between the liberty of inmates and the protection of society, it is important to consider ways in which the goals of Correctional Service Canada can be best met. These means must comply with the Corrections and Conditional Release Act which states the following:

3. The purpose of the federal correctional system is to contribute to the maintenance of a just, peaceful and safe society, by:
   a) carrying out sentences imposed by courts through the safe and humane custody and supervision of offenders;
4. d) that the Service use the least restrictive measures consistent with the protection of the public, staff members and offenders.

It is by no means clear that the random drug testing programme is necessary or sufficient for the safe and humane custody and supervision of offenders or that the Service is using 'least restrictive measures'. Similarly, the means used by CSC must comply with the Federal Privacy Act. Such compliance would require the following:

• Without random drug testing it would be impossible to supervise prisoners adequately.
• There are reasonable grounds to believe that drug testing can significantly reduce the risk to safety.
• There are no practical, less intrusive alternatives that could significantly reduce the risk to safety.

It is by no means clear that any of these conditions are met in the case of the CSC programme, so it would seem to be in violation of the Privacy Act. The considerable amount of money being expended on the random urinalysis programme could be put to more cost-effective and humane ends. Some practical, less intrusive measures to reduce violence in institutions would include the following:
• Development of programmes that address the underlying causes of drug use and drug
dependence in prisons.
• Decreasing crowding.
• Honest education about the effects of drugs.
• Acceptance of the fact that some drugs are associated with less aggressiveness and less
harm (e.g. marijuana) than others and that inmates should be allowed access to these.
• Increased access to fitness and sports activities.
• Increased availability of effective drug treatment programmes (the efficacy of current
programmes should be re-examined), including methadone.

CONCLUSIONS

The random urinalysis programme does not seem to comply with CSC's own mission to provide
a safe environment for staff and inmates through the application of least restrictive measures.
Indeed, the programme may well lead to decreased levels of safety in prisons. Further, the
programme does not comply with the requirements set down in the Federal Privacy Act.

It must be asked, however, what the desired results of the programme really are. It is purported
that the intent of the random urinalysis programme is to decrease drug use and drug-related
violence. However, given that the focus of the programme is on illicit drugs (random urinalysis is
a very poor way to detect alcohol use), it may be that perhaps one of its
main aims is to decrease non-compliance with the law? Is this not then just one more way in
which inmates are being subjected to unnecessary and intrusive control measures based on a
moral rather than a public health and safety agenda?

Given the environment of overcrowding, despair and boredom generated in most prisons, it is
hardly surprising that inmates attempt to alter their levels of consciousness. The large sums of
money spent on running drug testing programmes could be better invested in looking at ways to
minimise use and abuse of substances in prisons and in providing alternative means for
inmates to alter consciousness.

Rather than a cost-effective way to improve safety in institutions, random drug testing in
prisons, like in the workplace, is just one more application of moral technology in a 'War on
Drugs' that has become a 'War on Drug Users'. Surely it is time for Canada to reassess its adherence to the American approach to drugs, an approach that even many of its former supporters agree has failed at tremendous fiscal and human cost. Crime control has become an industry in the USA; drug testing is part of this very lucrative industry. We may well see crime control take on the same form in Canada if we do not stop fuelling its machinery. There are better, more humane, ways of improving the environment in prisons than random drug testing; surely it is time to look at some of these.

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Further reading:


Privacy Commissioner of Canada (1990) Drug testing and privacy Office of the Privacy Commissioner of Canada, Ottawa
