
IS RAILWAY WORKPLACE DRUG TESTING USING OMT LEGALLY DEFENSIBLE?

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Background

Urine has become the most widely used sample for workplace drug and alcohol testing. This is not because it necessarily has any inherent advantage over any other body fluid or tissue for these purposes, but is largely for historical reasons related to the technology available 30 or more years ago when the US military began testing personnel. Urine is not therefore a "gold standard" against which to judge other types of sample. Nevertheless, I will assume for present purposes that the use of urine sampling is now legally defensible, although as I indicate below I have considerable doubts as to its future defensibility in certain respects.

1. What is meant by defensibility?

There are two central meanings to defensibility for present purposes. Put in question form, they are as follows:

- 1.1 Will the testing technique, and all its associated processes, withstand critical courtroom scrutiny so as to form a successful basis for court, tribunal, or disciplinary proceedings?
- 1.2 Is the use of the technique consistent with good employment practices?

2. In what contexts may defensibility arise?

The principal contexts so far as legal proceedings are concerned will be:

- 2.1 Criminal proceedings (where the standard of proof is that of "beyond reasonable doubt"), for example prosecutions under s. 27(1) Transport and Works Act 1992 (for working whilst unfit through drink or drugs), under s. 27(2) Transport and Works Act 1992 (for working with excessive alcohol in the blood or urine); under the provisions of s. 28 of the 1992 Act a railway operator or employer may also be prosecuted if an individual employee is guilty of an offence; there may be prosecutions also for offences under other statutes, for example the Health and Safety at Work Act 1974, or for common law offences such as manslaughter.

- 2.2 The "due diligence defence" under s. 28(3) Transport and Works Act 1992, available to an operator or employer if it can show that it has exercised "all due diligence" (which is equivalent to exercising reasonable care) to prevent the commission of an offence under s. 27 by an individual employee: this will to a substantial extent require the operator or employer to have in place a proper and defensible system for the detection of drug and alcohol abuse.
- 2.3 Civil proceedings, where the standard of proof is "on a balance of probabilities", for example claims for damages by an injured passenger or fellow worker.
- 2.4 Internal disciplinary proceedings and employment tribunals, where the question would be whether or not an employer who took disciplinary action based upon a positive OMT test was acting reasonably in relying on the result of that test.

3. **Potential legal challenges to OMT: the Human Rights Act 1998**

Any Human Rights Act challenge to the use of OMT would be no different to such a challenge in respect of urine. The salient points in relation to the Human Rights Act are as follows:

- 3.1 To the best of my knowledge, since the Human Rights Act came into force in October 2000 there has in the UK been no successful challenge under the Act in respect of work place drug testing. There have, however, been successful civil liberties challenges in the USA, where the law varies from state to state and is much more diffuse and uncertain than in the UK, but also in Canada, where the law is much more similar to that applicable in the UK. It is therefore possible to anticipate the likely areas of vulnerability in the UK.
- 3.2 A possible, but unlikely, challenge (at least in respect of urine, but not OMT) might be under article 3, which provides that "no one shall be subjected to torture or to inhuman or degrading treatment or punishment": the challenge would have to be on the basis that the taking of the sample was degrading to the donor; however, European case law indicates that "degrading treatment" has to be similar in degree to torture.
- 3.3 The most likely challenge would be under article 8 which provides that "everyone has the right to respect for his private and family life...": this means, in general, -that an employer has no right to know what the employee is doing when he is not at work
- 3.4 However, the right to respect for privacy and family life under article 8 is qualified and not absolute, since article 8.2 permits (so far as is relevant for present purposes) "interference.....with the exercise of this right ...such as is in accordance with the law and is necessary...in the interests of public safety or for the protection of health". Nevertheless, any interference with the right must be *proportionate* to the purpose for which the interference is made.

- 3.5** The three questions relating to workplace drug and alcohol testing that are likely to be critical so far as article 8 is concerned are:
- 3.5.1** Is the testing method likely unnecessarily to give the employer more information than it is reasonably entitled to know about what the employee is doing when he is not at work -does it therefore show a lack of respect for his/her private and family life, and is it disproportionate to the need to protect public safety? The exact nature of the *detection window* (i.e. the time frame, from ingestion of drug to testing, within which a positive result will be obtained) of the testing method may be crucial here: a method that for example is performed on a working Tuesday which detects cannabis smoked at home on Saturday but does not detect cannabis smoked at work shortly before the test would probably fall foul of article 8.
 - 3.5.2** How closely does the result of the test relate to blood plasma levels, and therefore, in principle, to impairment of fitness to work? If a test result is of historic rather than current value, it will be less defensible as a justifiable, reasonable, or proportionate interference with privacy, save possibly in relation to pre-employment testing.
 - 3.5.3** Does the testing procedure respect the dignity and privacy of the person tested?
- 3.6** Answering the questions set out under 3.5 above, I conclude as follows in relation to the Human Rights Act aspects:
- 3.6.1** The work of Professor Ed Cone, the eminent US forensic toxicologist responsible for what is probably the largest database in the world comparing OMT with urine sampling, shows that although the detection *rates* for OMT and urine are similar, and the *length* of the detection windows of the two methods are broadly similar, the start and finish of their detection windows are very different: there is inevitably a delay before the metabolites of the relevant drug are excreted in the urine, so that the detection window with urine does not begin immediately, and ends relatively late. On the other hand, the detection window with OMT begins immediately after ingestion of the drug, but continues until a point in time earlier than that relevant to urine. This means, applying the principles set out in 3.5.1 above, that OMT is likely to be more compliant with article 8 than urine, because although both methods may interfere with the private life of the employee, the interference by OMT will be less, and will be more proportionate, than that caused by urine.

- 3.6.2** The work of Professor Cone, as well as that of Dr John Oliver, Reader in Forensic Medicine and Science at the University of Glasgow, shows that there is a good correlation between the concentration of a drug in OMT and the concentration in blood plasma; however, because of the delay in excretion of metabolites in urine mentioned in 3.6.1 above, there is likely to be less correlation between the result of a urine test and blood plasma levels. It follows, applying the principles set out in 3.5.2 above, that again OMT is likely to be more compliant with article 8 than urine.
- 3.6.3** Urine collection, if properly carried out in accordance with the established international and UK protocols (such as Appendix A to the UK Laboratory Guidelines for Legally Defensible Workplace Drug Testing), requires the adoption of security procedures to prevent adulteration that may well be offensive and embarrassing to the donor: for example, colouring agents must be placed in any water sources such as toilets or cisterns, and the donor must be asked to remove clothing that might conceal adulterants, and personal belongings such as a briefcase or bag must not be taken into the cubicle in which the specimen is voided. Such precautions are undoubtedly degrading and invasive of privacy and dignity, and may be viewed as such particularly by the overwhelming majority of employees who are "clean" and have no intention or desire to try to beat the system. There may also be particular embarrassment when a male collects a sample from a female donor, and vice-versa. By contrast, OMT has none of these problems, since the collection sample is not a body fluid of the same intimacy, the collection procedure is observed by the collector throughout, and elaborate and intrusive security precautions are unnecessary. I therefore have no doubt that, to answer the question set out in 3.5.3 above, OMT testing far better respects the dignity and privacy of the person tested than does urine testing.

4. Defensibility related to collection of the sample

From the perspective of the employer or operator, it is important to seek to avoid false negatives, since if, for example, a false negative test is obtained before an incident which transpires to have been caused by drug or alcohol abuse, the employer or operator may have difficulty in establishing its "due diligence" defence under s. 28(3) Transport and Works Act 1992. With this in mind, the following points seem to me to be important in relation to collection procedures:

- 4.1** The potential challenges to OMT are no different in principle to those that may be made in respect of urine samples. Many such challenges to the integrity of urine samples may be found on the internet, with advertisements for adulterants and other devices for compromising the validity of the results of a urine test; as yet, however, none are to be found in respect of OMT.
- 4.2** Adulteration or compromise of an OMT sample is highly unlikely, not only because there has been shown to be virtually no substances that could be consumed by the donor that would compromise the result without also causing severe toxicity to the donor, but also because the continuous observation of the donor by the collector, which is required and acceptable with OMT testing (but unacceptable on grounds of privacy with urine), means that there should be no opportunity for adulteration or compromise.

- 4.3 It must of course be recognized that, as with any system, effective supervision of the collection process is important: with OMT collection, the donor must not consume food or drink for 10 minutes before the collection, and there must be continuous observation of the donor for the minimum 2 minutes required for the collection itself.
- 4.4 It is improbable that the donor will be unable to produce a specimen of OMT, since only a very small quantity of fluid is required. However, in the clinical therapeutic testing field, where addicts may well suffer "dry mouth syndrome", experience shows that a sufficient OMT sample is obtainable. On the other hand, it is not unknown for potential donors to be unable (or to claim to be unable) to pass urine.
- 4.5 I have considered whether or not the small size of the OMT sample, which precludes the splitting of the sample, could successfully give rise to a legal challenge. Most drug testing procedures using urine or blood provide for a splitting of the sample or the voiding of urine into two containers, so that part (sample A) is sent for analysis on behalf of the employer or other body carrying out the testing, and the other part (sample. B) is given to the donor so that he or she can have his or her own analysis carried out if so desired. This is not possible with OMT, but I do not believe this creates any legal problem or grounds for challenge, since simultaneous OMT sampling from both sides of the mouth provides a sample for the use of the donor which is just as representative of the drug levels obtained from the other side of the mouth: work by Professor Cone shows clearly that results from samples taken from opposite sides of the mouth are for practical purposes identical. There is no legal requirement, for present purposes (although there would be in a prosecution of a worker under s. 27 (2) of the 1992 Act), to divide a specimen into two parts.
- 4.6 I was surprised to discover that "random" but pre-announced urine collection, in which the only random element is the selection of the donors, is used in the rail industry. It may be that this is in part because of practical difficulties in site preparation inherent in urine sampling in order to ensure security, but I have no doubt that if such pre-announced sampling were the only sampling undertaken by an operator or employer, there could be no successful defence of due diligence. OMT does not require the site preparation required for urine testing. Thus OMT can be collected on a surprise random testing basis at any location, even trackside, without the site preparation that would be likely to make it difficult to maintain full security. It can also be administered without delay post-incident.
- 4.7 The collection method with OMT is undoubtedly defensible. The factors set out above in my view make an OMT testing policy preferable to urine from a due diligence point of view.

5. Chain of custody issues.

In practice, the most common challenge in legal proceedings is as to the identity of the sample or of the donor. Since with OMT the collection is observed throughout, the first link in the chain of custody is stronger than with urine. That apart, there are no differences whatever in the chain of custody procedures, and there will be no issues that arise in relation to OMT that do not also arise in relation to urine. It has to be recognised that failures of the chain of custody may occur, but this has nothing to do with the type of the sample.

6. Defensibility of Laboratory Analysis

The following points require consideration:

- 6.1** How novel is the technology, and therefore how open is it to legal challenge? The laboratory technology and techniques are well proven and tested, and do not in principle or in terms of procedures differ from those used in respect of urine. The only difference lies in the small quantity of material that is analysed. At the dawn of urine testing many years ago, the technology to analyse the small quantities in OMT was not available -hence the historical reason for the wide use of urine testing. The technology for isolating drug from small quantities of OMT has now been available and in use for several years, and its reliability and accuracy appears well proven.
- 6.2** I was initially concerned that the quantity of each sample might not be sufficient to permit both the initial screening test and the confirmatory test, as well as sufficient for any subsequent quality control testing. I understand, however, that the sample, which is normally of about 1000 microlitres, is of more than sufficient quantity for all these purposes.
- 6.3** As with any laboratory analysis, it is necessary to show rigorous quality assurance and external accreditation, at least for the purposes of justifying the system or policy. This is not, however, a matter which in practice affects the defensibility of a technique for the purposes of legal proceedings, simply because although legal or disciplinary proceedings may (albeit very unusually) focus upon the accuracy of laboratory analysis, the focus will be on the accuracy of one particular test in relation to a single individual: for these purposes it may be necessary for the laboratory analyst to give evidence in court, but normally questions of QA or accreditation do not arise.

- 6.4 Likewise, the presence or absence of laboratory guidelines or protocols is not of great relevance so far as legal proceedings are concerned: the important question is whether or not in the particular case before the court the result of the analysis can be justified. Nevertheless, as yet there are no published laboratory guidelines for testing OMT, although this is only a matter of time. However, since the only essential difference between OMT and urine relates to the circumstances and technique for sample collection, it seems to me, having studied the UK Laboratory Guidelines for Legally Defensible workplace Drug Testing in relation to Urine, that even now any laboratory that followed the principles of these Guidelines when testing OMT would produce a legally defensible result.

7. Interpretation of Results

- 7.1 Different cut-off levels (i.e. the level above which the result is regarded as positive) are used for OMT as compared with urine, because of the different levels of drug or metabolite that will be present in the two fluids. The cut-offs for OMT are nevertheless well established both in the USA and the UK, and being used already in the UK in drug abuse and rehabilitation programmes.
- 7.2 Although the cut-offs are (and have to be) different, the detection rates of OMT and urine are broadly similar, according to the research of Professor Cone and others, but OMT appears to rather better than urine as a predictor of drug presence in blood, and its *detection window* is such that it is more efficient at picking up recent drug use (see 3.6.1 and 3.6.2 above). Thus it may be that OMT will detect different drug users to those detected by urine sampling.
- 7.3 The important role of the Medical Review Officer will be precisely the same with OMT as with urine.

8. CONCLUSIONS

- 8.1** I have no doubt that OMT is as legally defensible, in the senses and contexts mentioned in §§ 1 and 2 above, as urine. It essentially raises no different legal issues to urine, the only essential difference of fact being in relation to the method of collection, and the cut-off levels.
- 8.2** There are no Data Protection Act issues in relation to OMT that are in any way different to those that might arise with urine.
- 8.3** OMT could be used as evidence for the purposes of a prosecution under s. 27(1) Transport and Works Act 1992 (working whilst unfit through drink or drugs), although not under s. 27(2) Transport and Works Act 1992 (for working with excessive alcohol in the blood or urine).
- 8.4** An operator or employer which has a properly organised and implemented policy based on OMT testing would have a good "all due diligence defence" under s. 28(3) Transport and Works Act 1992.
- 8.5** OMT has substantial advantages over urine from a legal point of view, being more compliant with the Human Rights Act, because:
- The method of collection involves less loss of dignity (see 3.6.3 above);
- It is more efficient at detecting recent, rather than earlier, drug use (see 3.6.1), and the results are likely to correlate better with drug blood levels (see 3.6.2).
- 8.6** For the reasons given in 8.5, OMT is more consistent with good employment practices than urine.
- 8.7** I have considerable doubts about the defensibility of urine testing, not only because of the matters set out in 8.5 and 8.6 above, but also in relation to the "all due diligence defence" under s. 28(3) Transport and Works Act 1992. This is in part because the availability of the new technology involved in OMT highlights the drawbacks inherent in urine testing, but largely because the detection window of OMT makes it far more likely that recent drug use, and therefore current impairment, will be detected. Conversely, with a urine testing regime it is likely that the urine of an employee who has taken a drug just before an incident would test negative. In these circumstances, given the availability now of a testing method, OMT, that would have produced a positive result where the urine was negative, thy operator or employer may well not succeed in its defence to a criminal prosecution under s. 28 Transport and Works Act 1992.

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