
Testing Times:
Directors' Views on Health Testing at Work
IoD Research Paper

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1 Summary

- **Health testing at work is a not uncommon occurrence. There are different practices in relation to general health testing and tests done when there are particular hazards, such as exposure to particular biological or environmental factors (see section 3.1).**
- **Views on appropriateness of tests vary depending on whether routine tests for alcohol, drug use or other medical conditions are under consideration or whether there is concern about particular employees. Support for routine testing seems to be highest when there is the possibility of danger to another employee as a consequence of alcohol or drug use or some other condition (see section 4.1).**
- **Genetic testing can be a very emotive issue (see section 4.2). It is also a highly topical one, both with current developments, such as the Human Genome Project and also various governments' ethical and legal deliberations (see chapter 5).**
- **Institute of Directors (IoD) members surveyed have given very little support for any compulsion in general genetic testing in relation to work, although testing in relation to occupation-related hazards elicited a more equivocal response (see section 4.3). There are still many practical issues to consider, in relation to current and future legislation, and matters such as insurance, civil liberties and human rights.**

2 Introduction

2.1 Health and health testing at work

A 1998 telephone survey of IoD members conducted by NOP Business showed that over 80% of the 496 respondents agreed or strongly agreed that employers have an important role in improving employees' health¹. Forty two percent said that their organisation offered health checks or screening. For example, people who work in certain industries are routinely subject to health testing - such as, airline pilots and train drivers, because of the fairly obvious and direct safety implications. However, there have been new developments in both the scientific and legal fields that may well have an important influence on the approach to health testing at work.

2.2 Genes are now in fashion

President Bill Clinton and Prime Minister Tony Blair recently announced the success of the work of the Human Genome Project and of Celera Genomics - of mapping the detailed and complex genetic structure of human life - although the research was still incomplete at the time². The draft description of the sequence of human genes was announced in April 2000, and it was then expected that the full sequence would be known before the end of 2003 (reference 3). This is important for science, and will eventually be of importance in medicine and the development of new products in the pharmaceutical sector. Genetic screening may be able to identify people with a genetic susceptibility to developing a disease later in life, including those due to environmental exposures in the workplace.

We knew that the implications of genetic testing for employment had been discussed in the United Kingdom by the then Human Genetics Advisory Commission (HGAC, now the Human Genetics Commission - HGC), which produced a report on the subject in July last year⁴. In the light of such deliberations and in advance of more detailed work on the human genome, we wanted to ascertain directors' views on some of the issues in this controversial area.

3 Checking on health: current practices

3.1 Reports from IoD members

We wanted to get a picture of current practice among IoD members' organisations of health checks conducted or arranged for employees or prospective employees. A self-completion postal questionnaire was devised with the assistance of public health physician Dr Darren Shickle of the University of Sheffield. This was included in the January 2000 issue of ***IoD Policy***, which was mailed to all UK based IoD members in mid-January. By the closing date for return of questionnaires (18 February), 353 completed questionnaires had been received. The postal survey was meant as a successor to a set of telephone interviews that had been done in December 1999 – about which see section 4.2.1 on page 10.

“DOES YOUR ORGANISATION CURRENTLY PERFORM ANY OF THE FOLLOWING HEALTH CHECKS OR ARRANGE TO HAVE THEM CONDUCTED?”

TYPE	YES, ROUTINELY	YES, BUT ONLY IF CONCERNED ABOUT SPECIFIC EMPLOYEES	NO	DON'T KNOW	NO REPLY
Pre-employment questions about family medical history	33%	6%	59%	0%	1%
Pre-employment medical examinations	21%	16%	61%	0%	2%
Update of family medical history with existing employees	6%	5%	85%	1%	3%

353 questionnaires received. Total may not be 100% because of rounding.

Health was reportedly considered most often in the pre-employment stage. Altogether, 40% of respondents indicated that questions were asked (the total for routine use and if concerned about specific persons). Actual medical examinations were reported to be about as prevalent – by a total of 37% of survey respondents. Routine use of questions about family medical history was more common (33%) than medicals (21%). If concerned about particular applicants the situation was reversed, with 16% using actual medical examinations and 6% questions. Once on the payroll, updating of family medical history was reported to occur by a total of only 11% of respondents.

Use of pre-employment questions was more likely the larger the size of organisation as measured by number of employees (0-9, 10-49, 50-249 and 250 plus). Leaving out those who did not know, the mean ranged from only 21% in those with 0-9 employees, increasing to 66% in those with 250 or more employees. Similarly for use of pre-employment medical examinations - which were reportedly used in 13% of bodies with 0-9 employees, rising to 74% in those with 250 or over. This trend applied to medical examinations of existing employees, increasing from 24% in organisations with 0-9 employees up to 79% in those with 250 or over. This trend was not apparent when it came to an update of family medical history of existing employees, although in organisations of 250 or more employees it was 22%, compared with an average of 14% for the smaller organisations.

Questions were posed about the use of more specific tests, as shown in the table below. Note the very small prevalence of genetic testing.

“DOES YOUR ORGANISATION CURRENTLY PERFORM ANY OF THE FOLLOWING HEALTH CHECKS OR ARRANGE TO HAVE THEM CONDUCTED?”

TYPE	YES, ROUTINELY	YES, BUT ONLY IF CONCERNED ABOUT SPECIFIC EMPLOYEES	NO	DON'T KNOW	NO REPLY
Alcohol consumption	6%	12%	80%	0%	3%
Drug use	6%	11%	79%	0%	4%
Monitoring of environmental levels of substances hazardous to health	29%	6%	60%	0%	4%
Biological monitoring of individuals' exposures to substances hazardous to health, e.g. via blood sample	8%	6%	80%	1%	5%
Genetic tests	0.6% [*]	1% ⁺	94%	1%	4%

353 questionnaires received. Total may not be 100% because of rounding.

*NB: 2 directors reported this. + 4 directors reported this.

Again, it was the largest organisations (250 or more employees) that tested for alcohol or drug use most often (30% and 34% in total, respectively). Monitoring of environmental levels of substances hazardous to health increased from 9% (organisations with 0-9 employees) up to 44% where there were 50 or more employees. This type of monitoring is covered by particular parts of environmental or health and safety law, or both. A similar legislative situation exists for checking on biological monitoring of individual exposure to hazardous substances. For genetic testing, the respondent numbers were far too low to discern any association.

Excluding genetic tests for this same reason, organisations with employees who worked with substances hazardous to health - and who were covered by the Control of Substances Hazardous to Health (COSHH) Regulations - were reportedly more likely to have any of the previously-mentioned tests conducted than were organisations not covered by COSHH (apart from update of family medical history with existing employees, and drug tests, where it was not possible to discern a statistically significant difference). Perhaps those organisations which routinely monitor certain health indicators are better disposed than others to get involved in wider aspects of health monitoring.

4 Views on appropriateness

4.1 Checking on health

Views were sought on whether or not it would be appropriate to conduct certain tests, **irrespective** of current practice in the director's organisation. Whatever the feelings about civil liberties, use of alcohol and certain drugs can have real effects on employees' performance or that of colleagues. Views on testing in connection with other (unspecified) medical conditions were also sought.

"IRRESPECTIVE OF THE ORGANISATION'S CURRENT POLICY, OR TYPE OF INDUSTRY, DO YOU THINK THAT IT WOULD BE APPROPRIATE FOR EMPLOYERS TO CONDUCT TESTS FOR":

"ALCOHOL CONSUMPTION"

REASON	YES, ROUTINELY	YES, BUT ONLY IF CONCERNED ABOUT SPECIFIC EMPLOYEES	NO	DON'T KNOW	NO REPLY
Adversely affect attendance at work?	22%	61%	13%	2%	2%
Affect an individual's ability to perform their job?	27%	62%	8%	1%	2%
Mean an individual placed another employee in danger?	40%	53%	4%	1%	2%

"DRUG USE"

Adversely affect attendance at work?	27%	59%	10%	1%	2%
Affect an individual's ability to perform their job?	30%	60%	7%	1%	2%
Mean an individual placed another employee in danger?	43%	51%	4%	0%	2%

"OTHER MEDICAL CONDITIONS"

Adversely affect attendance at work?	18%	56%	20%	3%	2%
Affect an individual's ability to perform their job?	22%	59%	14%	3%	2%
Mean an individual placed another employee in danger?	32%	56%	7%	2%	3%

353 questionnaires received. Totals may not be 100% because of rounding.

From the preceding table it can be seen that views about testing for the effects of alcohol, drugs and other medical conditions were not dissimilar. For all three, directors tended to be in favour if there were concerns about particular employees, rather than taking a blanket approach. Support for routine testing was highest if it were considered as picking up cases where an individual would place a colleague at risk. Directors must themselves pay great attention to the employer's duty of care, so perhaps this finding is not surprising.

4.2 An emotive issue?

Ninety respondents provided further comments on health testing at work. About a dozen specifically mentioned their concern about infringement of civil liberties or individual privacy. Several raised this in connection with genetic testing. Similar strong feelings were expressed during a telephone survey of IoD members in December 1999 as part of the IoD's quarterly Business Opinion Survey.

4.2.1 A case study: IoD members speak

The IoD runs a regular telephone survey, called the Business Opinion Survey (BOS). This is conducted quarterly by NOP Business and is a computer-assisted telephone interview survey of a random quota sample of 500 UK based IoD members. The quotas are set so that the sample is representative of the IoD membership by broad geographic area, size of business and industry sector. The main part of the BOS contains standard questions on the state of business feeling about prospects, performance and possible trends. Each quarter a number of questions on issues of the day is included after the bulk of the BOS questions. BOS has been carried out by NOP Business since January 1997. In December 1999 questions on health and safety and also on health testing at work were included.

BOS is conducted from a call centre, and on each occasion a member of staff from the IoD Policy Unit keeps in regular touch with the staff members at NOP who are leading the work. Part of this liaison includes monitoring some of the early stages of interviewing to iron out any problems with the wording of questions.

Normally the tasks go smoothly, but on this occasion things were different. Fairly early on, NOP notified us that a number of survey participants had raised concerns as to why the IoD had been asking questions about health testing, and in particular about genetic testing at work. Apart from anything else, this was a strong indicator of the feeling among people who held leading positions in businesses and other organisations. After a few days, NOP Business suspended telephone interviewing for the whole Business Opinion Survey, because of concern about the adverse effects on that particular BOS but also about possible effects on the IoD as a professional organisation. It was then decided to omit the questions on health testing altogether before resuming: those on various health and safety at work issues were retained. The results from that part of BOS will appear in a forthcoming IoD publication on health and safety at work as well as being used in sending directors' views to the Government on planned revisions to the Health and Safety at Work Act 1974 and related matters.

Comments from BOS participants included grave concerns about civil liberties – and even worries that the IoD might somehow be planning to get involved in genetic testing at work (*it is not*). The reaction in itself provides an interesting anecdote around some of the emotive ethical issues that genetic screening raises.

In the Annex of this Research Paper are reproduced some of the (incomplete) findings from the December 1999 NOP questions on health testing at work.

The fact that genetic testing at work is currently on the agenda of several governments gives a rationale for having attempted to find out directors’ views on the issue.

4.3 Should genetic screening be on the board’s agenda?

As to whether the board of directors had discussed genetic testing in the workplace, 3% (11 respondents in the postal survey) indicated that it had, 92% that it had not, and 3% did not know. There was opposition in the postal survey to the idea of conducting genetic testing of employees if the purpose were to ascertain the general likelihood of developing heart disease; 56% were against, although 34% thought it would be appropriate if the person consented. If the reason for a test had to do with exposure in the workplace that might lead to an occupation-related disease, then 30% were against the idea, but 50% would be in favour if the employee consented. In neither situation was there much support for compulsion, as may be seen from the table below.

“WOULD IT BE APPROPRIATE FOR EMPLOYERS TO CONDUCT GENETIC TESTING OF EMPLOYEES?”

REASON	YES, IF EMPLOYEE CONSENTS	YES, COMPULSORILY IF IN EMPLOYEE'S BEST INTERESTS	NO	NO REPLY
To see if they will develop heart disease which might affect sickness or early retirement	34%	8%	56%	2%
To see if they are at risk of developing an occupation-related disease due to exposure in the workplace	50%	16%	30%	3%

353 questionnaires received. Total may not be 100% because of rounding.

Two broad issues were being examined. The first would be testing to determine the presence of genetic factors that might predispose a person to develop a particular illness (here, heart disease). Second, the testing of people who are considered to be at risk, such as aircrew exposed to potentially low oxygen pressures who might succumb if they had sickle-cell anaemia (a disease that diminishes the blood’s oxygen-carrying capacity). The two categories might be considered to be very different. In the first case the risks would not necessarily be work-related, so it may be that survey respondents were indeed tending to express concerns about civil liberties and infringement of personal liberties. However, in both cases testing could in principle indicate the likelihood of a disease arising, *which might or might not in fact develop*. In other words, the techniques (certainly in these early days) really relate to statistical probabilities across populations. Given that, what should an employer be expected to do with such information, were it to become available in this way?

5 Discussion

5.1 Strands of debate: human health and human rights

Employers may view health tests as fairly incontrovertible in some circumstances, although they must have due regard to the law. The inherent error of check-ups and tests (no test is absolutely perfect) is but one factor that must be borne in mind. When it comes to genetic testing such considerations may be even more pronounced. Ethical considerations seem to come even more to the fore.

The HGAC Report of 1999 stated that it had identified only one UK employer that used the results of genetic tests – the Ministry of Defence. It did cite a **1989** survey in the United States of America that referred to a small proportion of employers using such tests. It would not be a case of comparing like with like to compare the IoD's survey findings with those of the HGAC. They, however, are both consistent with a view that current levels of genetic test use at work are minimal in the UK, however.

Concerns have been raised about issues such as potential effect on individuals' insurance. The Association of British Insurers (ABI) has a code of practice that places a moratorium on the use of genetic tests. It has been alleged that not all insurers were observing that, and that in any case some 5% of insurance companies were not members of the ABI or did not observe its codes of conduct⁵. Certainly, in the USA, where private health insurance is the norm, it is a huge issue⁶. It has been suggested that the notion that insurers would want to force people to take genetic tests so that they could turn down applicants or charge higher premiums is too pessimistic⁷. Rather, because insurers could lose money if they did not have access to the result of such a test, they could be more interested that those people who **choose** to have a test **disclose the result**.

Nevertheless, such concerns remain (as well as others referred to earlier). In a survey in the USA in 1996, 13% of respondents said that they or a member of their family had lost a job as a direct consequence of a genetic condition⁸. The USA this year has forbidden any federal agency from using genetic information as a basis for hiring, promotion or dismissal of employees, and President Clinton also endorsed an act introduced that would extend these prohibitions to the private sector and to those buying health insurance⁹. Germany also intended to ban firms from imposing compulsory genetic testing on employees or customers¹⁰.

There is no UK legislation specifically referring to genetic testing and employment. As IoD members know, employers do have to have regard to laws on discrimination, including those on disability. At least one legal expert has suggested that an employer could lawfully require someone seeking employment to take a genetic test, and it would not be illegal to use the resulting information to decide whether or not to employ ¹¹.

5.2 A testing time for employers: genetics, government and the law

The Government responded¹² to the HGC on 24 July 2000 about the HGAC Report . It endorsed the HGAC's opinion that genetic tests should not be used to try to predict future health of potential or existing employees or to exclude people from employment or promotion. This was in line with the views of the majority of IoD members who responded (56% indicating that they were not in favour of the example given). As to whether information on genetic makeup should be used to find out who might be at risk from some environmental factor at work, the Government has urged caution; it might be an appropriate test, but the employer's duty of care under health and safety law means that removal of the employee from a potential hazard – rather than taking measures to protect the worker – should be an action of last resort. Half of the IoD respondents were in favour of testing in such circumstances if consent were given but only 16% favoured compulsion.

The issue of genetic testing and employment is still a very controversial one. Concerns involving civil liberties, scientific and medical uncertainty, set alongside the duty to obey laws including the Health and Safety at Work Act 1974, and current discussions relating to the Disability Discrimination Act 1995, the Data Protection Act 1998 and forthcoming human rights legislation mean that is not a topic that is likely to become extinct in the near future. Other problems lie with such questions as to whether it is appropriate to provide a test for a condition for which there is no cure¹³. On the basis of comments by the Parliamentary Under-Secretary of State for Science and Innovation, Lord Sainsbury of Turville, the UK Government apparently intends to introduce legislation to outlaw genetic testing by employers ¹⁴. The IoD will try to unravel some of these issues as they evolve.

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Annex:

Some NOP Business Opinion Survey results

IoD Member Survey: Method

The questions on health testing issues asked of IoD members were treated as some of the additional ad hoc questions to the regular IoD Business Opinion Survey.

The IoD Business Opinion Survey is designed to provide an up-to-date indication of current trends within the UK economy. The survey is carried out on behalf of the IoD by NOP Business and is conducted every three months by telephone.

The results presented on the following pages are based on interviews with IoD members carried out in December 1999. The total sample was randomly drawn from the IoD membership database and was structured so as to be representative in terms of company size, industrial sector and region. A detailed breakdown of the sample structure is provided in the data tables. For simplicity, different types of firms are referred to as follows:

Size	
1-20 employees	"Micro"
21-100 employees	"Small"
101-200 employees	"Medium"
201+ employees	"Large"

The relate to some results here of the questions, on health checks at work in general and also to more specific checks, including views on genetic testing at work.

IMPORTANT NOTE

As stated on page 10, the results presented here are from a curtailed part of the Survey. For that reason alone ***they should not be taken as a statistically reliable guide to IoD members' views. They are presented simply as further background on some of the issues.*** The full survey had 500 participants.