HSE
Health & Safety Executive

Self-reported work-related illness in 1995

Results from a household survey

Government Statistical Service

Self-reported work-related illness in 1995

Results from a household survey

Miss J R Jones, Mr J T Hodgson, Miss T A Clegg and Dr R C Elliott

HSE BOOKS

First published 1998

ISBN 0 7176 1509 X

ACKNOWLEDGEMENTS

Our thanks go to the Office for National Statistics for assisting in the development of the Survey, and for completing the data collection, in particular Beverley Jackson, Deborah Lader, David Devore, Paul Hunter and Patrick Heady.

We would also like to thank members of HSE who contributed to the development of the Survey, and the production of the report. Colin Mackay, Ron McCaig and Roger Rawbone helped in the development stages. Sally Edmondson, Gillian Green and Claire Bransby assisted with the statistical aspects. Eamonn Gilmurray, Gillian Owens, Val Clayton, Lori Woods, Jimmy Murphy, Pauline Dickson, Eileen Morris and Tony Webster provided clerical support. John Osman provided advice and support throughout the Survey.

Most of all we would like to thank members of the public who gave their time to take part in the Survey.

AMENDMENTS TO: "SELF-REPORTED WORK-RELATED ILLNESS IN 1995: RESULTS FROM A HOUSEHOLD SURVEY"

Since it was first published in 1998, amendments have been made to the publication "Self-reported work-related illness in 1995: Results from a household survey". These amendments have been incorporated into this version for the website and are outlined below:

Pages vi-ix Executive Summary
The Executive Summary was revised in September 1999 to include revised economic impact data.

Page 13 Table A
The number of eligible addresses in the October 1995 Omnibus Survey was changed from **26** to **2695**.

Page 31 Table H
The number of sample cases for 3 illnesses was changed from **365** to **36**.

Page 36 first sentence 1st paragraph
"**section 2.12**" was replaced with "**section 3.7**"

Page 43 last sentence 7th paragraph
"caused or made worse by" was replaced with **"caused by"**.

Pages 51-54 Economic Impact
This section was rewritten in September 1999 to include revised economic impact data. See information sheet **"Economic Impact: Revised data from the self-reported work-related illness survey in 1995"** for further details.

Page 81 Table 12
Sample cases for 'Back affected' was changed from **305** to **375.**

Page 96 Table 21
The percentage for 'Relationships at work' was changed from **0%** to **5%.**

Page 170 Table 83
The central prevalence estimate for 'All persons' was changed from **85 000** to **82 000.**

Pages 172-181 Tables 85-93
These tables were amended in September 1999 to include revised economic impact data. See information sheet **"Economic Impact: Revised data from the self-reported work-related illness survey in 1995"** for further details.

Page 182 Table 94
In this table, the heading **"Days limited activity (per million)"** was replaced with **"Days limited activity (millions)"**.

Page 186 Table 96
The percentage in the column titled 'Aware that health could have been affected' for 'Back affected' was changed from **71** to **24.**

Page 190 Table 99

The last section of Table 99 was changed as follows:

	Sample cases	Percentage of cases that could have made changes
Musculoskeletal disorders	**716 (originally 377)**	**33 (originally 37)**
ULN affected	**311 (originally 716)**	**31 (originally 33)**
Back affected	**377 (originally 311)**	**37 (originally 31)**

Page 227 question 154

The variable name **WOKESHBR** was replaced with **EXERSHBR**

CONTENTS

EXECUTIVE SUMMARY

SURVEY DESIGN

As part of a continuing programme to develop information on work-related illness, the Health and Safety Executive (HSE) undertook a survey based on the perceptions of affected individuals. From August 1995 to February 1996 nearly 40,000 subjects in the fifth wave* of the Labour Force Survey (LFS) were asked:

> "In the last 12 months have you suffered from any illness, disability or other physical problem that was caused or made worse by your work? Please include any work you have done in the past."

Respondents who said "Yes" to this question were asked if they would agree to a further interview to record details of their work-related illness. Those who agreed (about 70%) were re-interviewed using a detailed questionnaire (see Appendix 2) covering the nature of the illness; the job which caused it (or made it worse); how the job had led to the illness; the number of work days lost; the presence and intensity of a selected list of risk factors in the job linked with the illness; the level of knowledge of the risk in the workplace and preventive measures taken; symptom descriptions (for some disease categories) and smoking habit (for subjects reporting lower respiratory disease).

The same main screening question, together with a limited number of follow-up questions, had been used in the main 1990 LFS, and a detailed report of the results was published in 1993[1]. This 1990 survey provided the main statistical input to the Good Health is Good Business (GHGB) campaign. The widely quoted estimate of 2.2 million people affected by an illness they believe was caused or made worse by their work derives from the 1990 survey. Changes in the design of the LFS meant that the same survey process could not be followed in 1995. This has the disadvantage that comparisons between the two surveys can only be made at a very broad level. But it also has the advantage of removing the limits on interviewing time imposed by the needs of the main LFS, so that at the follow-up stage the 1995 survey could collect much more detailed information.

In addition to the interviews with sufferers, the 1995 study includes two further elements. Firstly, with the respondent's consent, the doctor or specialist who treated the illness was contacted, and asked to confirm (or correct) the recorded diagnoses, and offer their own opinion about the link with work. Secondly, to help identify features of the job which may be associated with a work-related illness a control population was asked the same questions on working conditions that appeared in the follow-up questions for sufferers of work-related illness. In addition, to aid interpretation of the main survey the same questions on chest problems, smoking and general health were asked so that background levels of certain health problems could be determined. The control population questions were included in two monthly cycles of the Office for National Statistics (ONS) Omnibus survey (in August and October 1995) giving a total sample of 3029 people who had held a paid job in the last ten years.

* Each household in the LFS sample is interviewed five times at approximately quarterly intervals. During each quarter, households on their initial interview are referred to as the first wave, those on their second interview the second wave, and so on. Fifth wave households are those having their final LFS interview.

RESPONSE RATES, RELIABILITY AND SAMPLING ERROR

Out of 39 863 adults in the sample who had ever worked, 7% (2 711) reported an illness in the last year which was caused or made worse by work. The LFS accepts proxy responses when a household member is unavailable for interview, and a few (55) of these were not sure if the person they were responding on behalf had such an illness. Overall, proxies reported rather less work-related illness (6%) than first persons (8%). Over 70% of all respondents reporting a work-related illness consented to a follow-up interview.

Interviews were obtained for 1 735 (61%) of the 2 845 people eligible to be interviewed for the follow-up survey. All follow-up interviews were with the affected person themself. When re-interviewed, 161 people originally recorded as having a work-related illness changed their mind and said they did not have a work-related illness. The estimates in this report are based on the responses obtained at the 1 551 detailed interviews with respondents who believed they had a work-related illness.

The main aim of the survey is to measure the numbers and types of illnesses caused by people's work. What the survey actually records is the opinion of individuals who believe themselves to be so affected. This is of interest and importance in its own right, but cannot be taken directly as an indicator of the 'true' extent of work-related illness. People's beliefs may be mistaken: they may ascribe the cause of illness to their work when there is no such link; and they may fail to recognise a link with working conditions when there is one.

With respondents' written consent, the details of their work related illnesses were checked with the treating doctor (usually the GP). In only 11% of cases where the doctor gave an opinion on the work link, was work considered "unlikely to be" or "definitely not" the (or a) cause of the illness.

Medical opinions were only available for about half the cases, all individual responses were therefore reviewed and were excluded from the main analyses if:

{ the reported work cause was implausible;
{ the illness arose from war conditions; or
{ the illness was caused by an accident other than a manual handling accident.

Where a GP response was available, the GP view was taken into account but not necessarily taken as decisive.

Illnesses thought by respondents to be caused by "stress" have been treated as a separate category, described as "stress-ascribed" diseases. Regardless of whether the disease reported can in fact be caused by stress, these cases are best considered as indirect reports of stressful work conditions. This is because for most diseases the affected individual has no way of observing the effect of stress on the disease process. Thus, while there is good evidence that working conditions do affect the risk of circulatory disease in people exposed to them, estimates of the extent of work-related circulatory disease can only properly be based on controlled epidemiological study of working populations in which other risk factors are appropriately measured and controlled for. Self reports of heart disease caused by stress may be correct, but cannot be regarded as a reliable basis for estimating the extent of work-related heart disease.

A total of 363 respondents were excluded in this review, and the estimated overall prevalence is reduced from 2.6 million to 2 million, a drop of 24%. The preliminary results reported in Health and Safety Statistics 1996-97 gave an overall prevalence estimate of 2.5 million. This estimate excluded accidental injuries in the previous year, but made no further exclusions.

The relatively small size of this sample means that the estimates based on it are imprecise, particularly for the smaller categories of illness or for individual occupations. As a reminder of these uncertainties, range estimates are given as well as point estimates. The ranges given are the 95% confidence limits for the point estimate, which means that each range has a 95% chance of including the true value (i.e. the value that would be found if the entire population had been surveyed).

KEY FINDINGS

The key findings of the 1995 SWI survey are:

- The estimated prevalence of self-reported work-related illness in Great Britain in 1995 was 2 million[+] (CI: 1 897 000 to 2 136 000)

- 721 000 (CI: 647 000 to 794 000) of these affected people were no longer in work. Of the remaining 1.3 million, 672 000 (605 000 to 738 000) took no time off work, 624 000 (CI: 560 000 to 689 000) lost an estimated 18 million (CI: 14.5 million to 21.4 million) working days because of their illness[#]

- The main categories of illness are musculoskeletal conditions with an estimated 1.2 million (CI: 1 064 000 to 1 246 000) people affected, and stress an estimated ½ million (CI: 456 000 to 574 000)

- Other illness categories with substantial estimated numbers affected were:

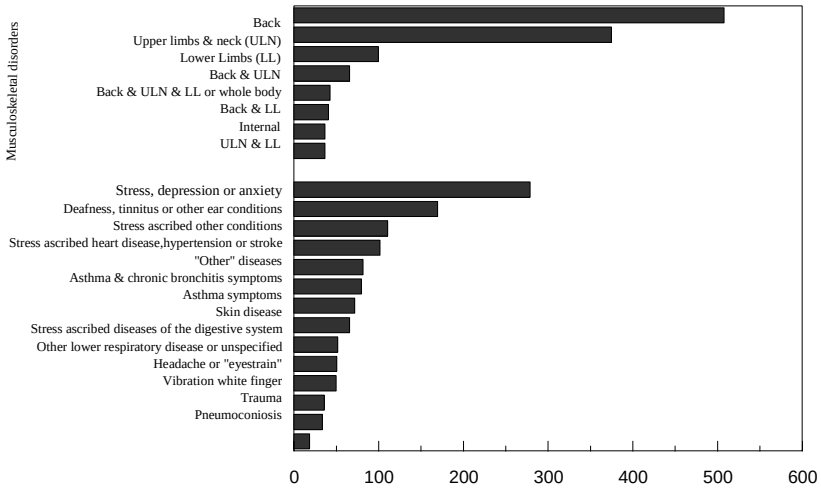
  Lower respiratory disease 202 000 (CI: 163 000 to 241 000)
  Deafness, tinnitus or other ear conditions 170 000 (CI: 135 000 to 206 000)
  Skin disease 66 000 (CI: 43 000 to 88 000)
  Headache or "eyestrain" 50 000 (CI: 31 000 to 68 000)
  Trauma 34 000 (CI: 19 000 to 48 000)
  Vibration white finger 36 000 (CI: 19 000 to 53 000)
  Pneumoconiosis 19 000 (CI: 8 000 to 29 000)

A variety of other work-related illnesses accounted for a further 82 000 (CI: 58 000 to 105 000) estimated cases. These numbers add to more than 2 million, since an individual can have more than one illness. Figure 1 shows the estimated prevalence by disease group.

[+]After excluding certain cases (those where the reported work cause was implausible; cases arising from war conditions; and cases caused by accidents other than manual handling accidents).

Economic impact data have been revised since the publication of "Self-reported work-related illness in 1995: Results from a household survey". An explanation of the revisions can be found in the information sheet: "2/99/EMSU: Economic impact: Revised data from the self -reported work-related illness survey in 1995" at www.hse.gov.uk/statistics/2002/ecimpact.pdf.

Figure 1 Estimated prevalence of work-related illness, by disease group



♦ The highest overall prevalence rates for self-reported work-related illness were found in coal mining, nursing, "other" processing, construction and teaching, with over 7% of current/recently working workers affected[$].

{ Over half the workforce works in an occupation with a self-reported prevalence rate of 3% or less. Most of these lower risk jobs are non-manual.

COMPARISON WITH 1990 SURVEY

As discussed above, differences in the design of the two surveys mean that only the broadest comparisons can be made. In these terms the findings are similar. Estimated overall prevalence for England and Wales, before adjustments, was 2.3 million in 1995 compared to 2.2 million in 1990. Within the total the contributions for musculoskeletal conditions and stress have increased, while the numbers in most other disease categories have fallen.

The most striking apparent change is in the estimate of work days lost, which has increased from 12 million in 1990 to 18 million[∀] in 1995. This change is mainly due to design changes, and has four components: an adjustment for part-timers (this is the only design change which results in a fall in the number of days lost from 1990 to 1995); the inclusion of Scotland in the 1995 survey; the inclusion in the 1995 survey of the number of working days lost for respondents who had quit their job during the year because of their illness (the days lost by these cases were excluded from the 1990 figures); the inclusion in the 1995 survey of the number of days lost due to illnesses other than the most serious (the 1990 survey only counted one illness per person, which was the most serious if there was more than one).

[$] For coal mining the recorded rate was 39%, but based on only 5 sample cases.

[∀] The total number of days lost in 1995 has been revised since publication of "Self-reported work-related illness in 1995: Results of a household survey". Revised figures can be found in the information sheet: "2/99/EMSU: Economic impact: Revised data from the self-reported work-related illness survey in 1995" at www.hse.gov.uk/statistics/2002/ecimpact.pdf.

1. INTRODUCTION

This is the second survey the HSE has undertaken to get a view of work-related illness based on the perceptions of individuals. The motivation for taking this approach comes from a number of different directions. In the first place we believe such surveys can provide a useful perspective on the occurrence of work-related illness. Secondly, public concern is one of the determinants of HSE's policy, and people's opinion about work-related illness is therefore of interest in its own right. Furthermore, there is growing interest in those categories of work-related illness which are not exclusively caused by work, but where work is an important contributing factor alongside others. The compensation system, employer reporting and medically based reporting only partially cover work-related illnesses of this kind.

There are really only two feasible strategies for taking a comprehensive statistical measure of the question. One is to undertake detailed aetiological studies of case populations in which disease outcomes can be studied in relation to work and other potential causative factors. This approach provides the best way to understand the mechanisms involved. But studies of this kind can rarely be on such a scale that they can serve as a basis for estimating the general prevalence of work-related cases, or the distribution of such cases across occupations.

The other approach is to rely on self-reporting. The approach also has drawbacks, but providing individuals can give broadly reliable information, these surveys provide a cost effective way of approximately quantifying the scale of work-related illness. The evidence of the 1990 HSE survey and the one presented here suggests that there is a reasonable degree of reliability in individual responses across a range of illness categories. For example, both the surveys give self-reported estimates of pneumoconiosis that are consistent with data from the compensation system. In the 1995 survey, when individual reports were checked with respondents' GP's, the GPs provided a relatively high level of agreement (only 11% of doctors thought their patient's self-reported work-related illness was unlikely to be, or definitely not work-related). Both reports include an assessment of the reliability of individual reports. In the 1990 report this was based on internal evidence, since there was less detail on individual cases: only two categories of illness - heart disease, hypertension and stroke and "other" illness - were judged to be uninformative. These represented about 11% of the total. In the 1995 survey individual cases were reviewed (see section 3.2 below). This review identified about 12% of cases where the reported link with work conditions seemed either non-causal or mistaken (these cases are excluded from the main analyses). The additional detail available to the 1995 survey also allowed us to identify "stress" as the perceived cause of most self-reported work-related heart disease (and of some other illnesses). For reasons that are more fully discussed in section 3.2.5 these have been taken in the present report as indirect indications of stressful working conditions rather than of instances of genuinely work-related heart disease.

Our judgement is therefore that, sensibly interpreted, the survey provides valid and relevant information not available from other sources. However, when considering the overall estimates it must be borne in mind that the cases identified by self-reports are predominantly cases in which the effect of work act alongside other influences. Cases of "classical" occupational diseases are included, but form a minority of the total. Where the "classic" types of occupational disease are concerned other sources of information are important: compensation data and data from employer and medical reporting networks (e.g. SWORD, EPIDERM and OPRA). The annual HSE publication "Health and Safety Statistics" attempts to draw together all these sources to form a composite picture for each category of disease. The present report, naturally, focuses on the results of self-reported work-related illnesses from the 1995 survey.

The 1995 Self-reported Work-related Illness (SWI) survey collected a great deal of detailed information from its respondents, and not all of this has been exploited in the present report. Further reports on particular aspects of the survey data are planned, including the examination of multiple risk factors in relation to musculoskeletal conditions and "stress"; an analysis of the role of smoking in self-reported work-related respiratory disease and an examination of regional differences, and the extent to which they can be explained by differences in job profile.

2. SURVEY METHODS AND DESIGN

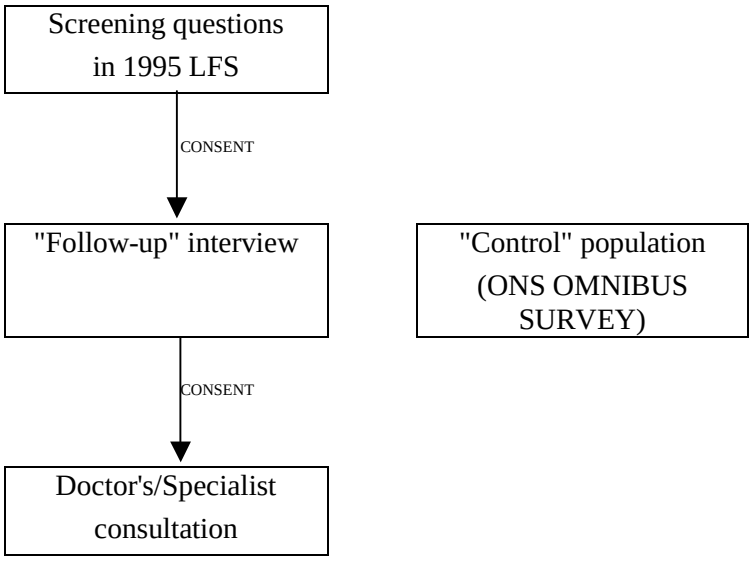
Individuals who have suffered from some work-related illness in the previous 12 months were identified by including a set of screening questions (Appendix 1) in the Labour Force Survey (LFS) between August 1995 and February 1996. With permission, positive respondents were followed-up and re-interviewed. This part of the study repeated questions included in the 1990 survey and also asked some additional questions (Appendix 2 shows the follow-up questionnaire).

The study includes two further elements. Firstly, to confirm the information given by the respondent, and to collect some further details about the illness, with the respondent's written consent (Appendix 3), the doctor or specialist who treated the illness was contacted, and asked to complete a questionnaire (Appendix 4). Secondly, to help identify features of the job which may be associated with a work-related illness a control population was asked the same questions on working conditions that appeared in the follow-up questionnaire for sufferers of work-related illness. In addition, to aid interpretation of the main data set the same questions on chest problems, smoking, and general health were asked, so background levels of certain health problems could be determined. The control population questions were included in a module of the Office for National Statistics' (ONS) Omnibus survey (Appendix 5).

Each part of the study, except the control population (which repeats questions from the follow-up questionnaire) was piloted, and changes were made to improve the methods and questionnaires for the live study, following recommendations made by the ONS and HSE staff.

The relationship between the four parts of the Self-reported Work-related Illness (SWI) survey are shown in Figure 2.

Figure 2: Study design



2.1 SCREENING

A sample of individuals who suffered from some work-related illness were identified by including a set of screening questions (Appendix 1) in the LFS between August 1995 and February 1996.

2.1.1 Labour Force Survey (LFS)

The main part of the SWI survey was conducted in conjunction with the LFS in order to take advantage of its existing arrangements for sampling and interviewing a large nationally representative household survey sample.

The LFS provides a rich source of information about the labour force using internationally agreed concepts and definitions. It collects data on: employment; self-employment; hours of work; unemployment; redundancies; education and training and many other topics. The LFS includes demographic, industrial and occupational information on the national population, providing consistent denominator data for calculation of rates in the SWI survey.

The LFS is a survey of households living at private addresses in Great Britain conducted by the ONS. Since 1992 a full LFS has been carried out quarterly in Great Britain[2]. The new quarterly design allows good estimates for each quarter to be produced as well as changes over consecutive quarters. The sample is designed to produce a sample of about 60 000 responding households in Great Britain. Each quarter's sample is made up of 5 "waves", each of approximately 12 000 private households. Each wave is interviewed in 5 successive quarters, such that in any one quarter one wave will receive their first interview, one their second, and so on, with one receiving their fifth and final interview. Thus there is an 80% overlap in the samples for successive quarters.

Only fifth wave LFS respondents were asked the screening questions, because of concerns about respondent fatigue and consequent drop out rates for the LFS. About 24 000 households, nearly 40 000 adults were administered the screening questions.

2.1.2 Sample

The main sampling frame for the GB LFS is the Postcode Address File (PAF) of 'small users' which includes private household addresses. An additional sampling frame for NHS accommodation has been specially developed for the LFS.

The LFS utilises a two-stage sampling procedure; the first stage is a stratified random sample of areas and the second stage a systematic sample of addresses. The country is split into 110 interviewing areas. Each of these areas is split into 13 "stints". These 13 stint areas have been randomly allocated to the 13 weeks of a quarter. The same stint area is covered by an LFS interviewer in the same week each quarter. A systematic sample of addresses is selected for each quarter throughout the country and is distributed between stint areas to provide a list of addresses to be interviewed each week.

The screening questions (Appendix 1) were included in weeks 11 to 13 of the summer quarter, all of the autumn quarter and weeks 1 to 10 of the winter quarter. Although the screening questions were not included in two full LFS quarters, the interviewing cycle will ensure that 26 weeks of data collection is still representative of Great Britain as a whole.

2.1.3 Fieldwork

In advance of the first LFS interview a letter is sent to every address in the selected sample explaining that their address has been selected and that an interviewer will be calling. Additionally, in the advance letter respondents are assured that the information they give will be treated in strictest confidence and will not be made available to analysts in any form in which individuals, or households, can be identified. The advance letter also includes a leaflet giving information on how the LFS data are used.

Households are interviewed face-to-face at their first inclusion in the survey and by telephone, if possible, at quarterly intervals thereafter. Hence, the screening questions were mostly administered over the telephone. Face-to-face interviewers use laptop computers and telephone interviewers networked desktop microcomputers.

The LFS allows interviewers to take answers to questions by proxy if a respondent is unavailable. This is usually from another adult, related, member of the same household. About 30% of LFS responses are from proxies.

2.1.4 Screening questions

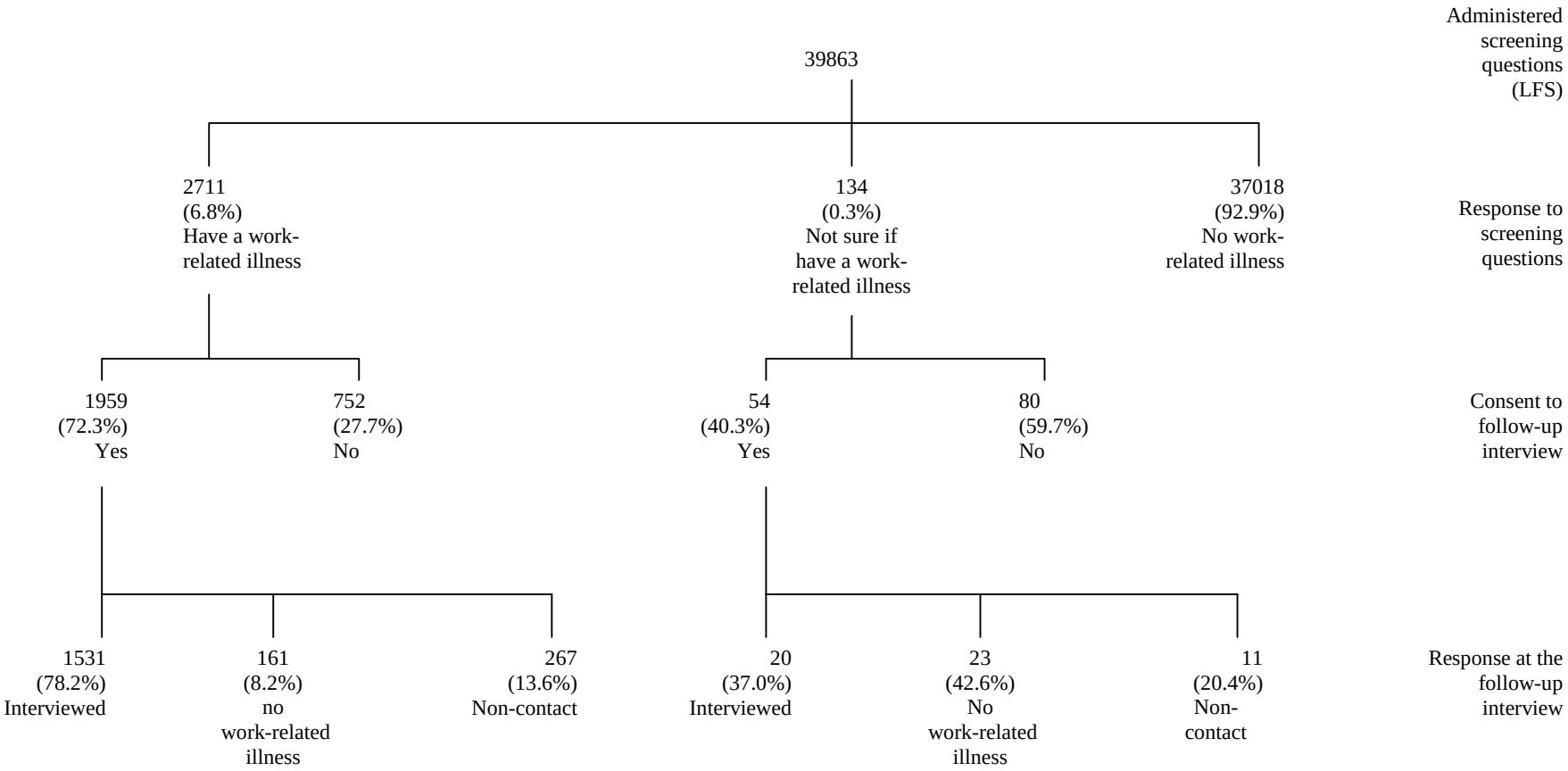
The screening questions were administered to wave 5 respondents aged 16 or over, who were currently employed or who had been employed in the past. The first question identified adults who had suffered from any illness, disability or physical problem caused or made worse by their work (including work done in the past) in the 12 month period prior to the interview. If they responded positively, whether about themselves or another household member, they were asked to describe the illness or illnesses. They were also asked whether they, or the person for whom they were responding would be willing to answer some further questions about the reported illness(es) at a later date. Proxy responses saying 'don't know' to this question were followed-up, but as only sufferers were interviewed at the next stage, the sufferer was given the option to participate when contacted. Appendix 1 contains a copy of the screening questions. As discussed earlier the LFS also provided demographic and occupational information about the sufferer.

2.1.5 Response rates

The overall response rate for wave 5 of the summer, autumn and winter quarters of the 1995 LFS, which included the screening questions, was 75%. This includes refusals at earlier waves being carried forward.

Out of 39 863 adults aged 16 or over who were currently employed or who had been employed in the past, who were administered the screening questions (Figure 3), 7% (2 711) reported an illness in the last year which was caused or made worse by work. A further 0.3% (134) were not sure if they or the person for whom they were responding had such an illness. Overall (Table 1), proxies reported rather less work-related illness (6%) than first persons (8%), and the 'economically inactive aged 70 years and over' group (which includes proxy and first person responses without separately identifying them) reported 5%. Over 70% of all respondents reporting a work-related illness consented to a follow-up interview. Consent was highest for first person interviews (75%).

Figure 3: Outcome of LFS screening questions and follow-up



At the screening stage, 61% (1665/2711) of respondents suffering from a work-related illness (Tables 1 and 2) reported a musculoskeletal disorder (bone, joint or muscle problem). The second most commonly reported complaint was stress, depression or anxiety. Amongst the 'economically inactive aged 70 years and over' only 4% of respondents reported stress, depression or anxiety, compared to 21% of the first person respondents and 16% of the proxy respondents. Respiratory disease (breathing or lung problem) was reported by 12% of respondents, but the proportion was particularly high, just over one quarter, amongst the 'economically inactive aged 70 years and over'. Some 7% of respondents reported a hearing problem, but as with respiratory disease a high proportion, 20%, of the 'economically inactive aged 70 years and over' reported such a condition.

2.1.6 Weighting

Weighting, or grossing serves two purposes. Firstly, it enables population estimates to be produced, and secondly, it compensates for differential non-response among different sub-groups in the population.

The LFS collects information on a sample of the population. To convert this information to give estimates for the population the sample data are grossed up. Each case is given a weight which can be thought of as the number of people that case represents. Because additional information from official population estimates and projections is used for calculating weights, this 'ratio estimation procedure' improves the precision of the LFS estimates. In addition, because of differential non-response, some people are more likely to be in the sample than others. The LFS grossing procedure helps correct for this.

In the LFS a three stage grossing procedure is used. Stage 1 uses population estimates of all people in each local authority district; Stage 2 uses estimates of men and women aged 16 to 24 by single year of age at national level; Stage 3 uses estimates of men and women by five year age bands in each region. A convergent iterative procedure is undertaken in order to ensure that the later stages do not upset the earlier ones.

The population screened for work-related illness were grossed separately by ONS using the method described above, each person has been assigned a weight or "grossing factor" related to the person's age, sex and region of residence.

2.2 FOLLOW-UP INTERVIEW

With permission, positive respondents were followed-up and re-interviewed. This part of the study repeated the questions included in the 1990 survey and also asked some additional questions.

2.2.1 Fieldwork

The follow-up interview was conducted like a 6th wave of the LFS. About 75% of the interviews were by telephone and the remainder face-to-face. As with the LFS, interviewers conducting face-to-face interviews used laptop computers, and telephone interviewers used desk top computers. Data were recorded via a computer assisted software package 'BLAISE' directly onto a secure computer system. Interviews took place, generally, about 6 weeks after the LFS interview and lasted on average about 30 minutes.

2.2.2 Follow-up questionnaire

The follow-up interview started by referring back to responses to the screening questions, and established whether the respondent had one or several work-related illnesses and a broad categorisation of each illness (Appendix 2, questions 1-7).

It then went on to collect information about each separate work-related illness reported, up to a maximum of four. Questions were asked about each illness, establishing - amongst other details - the nature of the illness; the job that was thought to have given rise to the condition; how the job had led to the illness; the number of work days lost and the level of knowledge of the risk in the work place and preventive measures taken.

Administration of certain questions depended on the type of condition reported, in particular whether the condition was a musculoskeletal disorder, respiratory disease, hearing problem, skin condition, stress, depression or anxiety or an "other" condition. For example, depending on the condition reported, respondents were asked certain questions about different aspects of their job and working conditions (Appendix 2, questions 88 to 129). They were actually only asked about certain working conditions which were known to be potentially associated with the occurrence of their work-related illness.

Respondents reporting a respiratory condition were asked a selection of questions from the Respiratory Symptoms Questionnaire designed by the Medical Research Council[3] and from The Bronchial Symptoms Questionnaire developed by The International Union Against Tuberculosis and Lung disease[4]. Responses to questions were used to detect chronic bronchitis symptoms and asthma symptoms, and to provide some measure of the severity of the condition reported. Respondents reporting a respiratory disease were also asked a set of questions on smoking which have been regularly used in the OPCS General Household Survey[5].

To examine the severity of hearing impairment, respondents reporting a hearing condition were asked questions from the National Study of Hearing[6] conducted by the MRC Institute of Hearing Research (Appendix 2, questions 169-173). Respondents suffering from a hearing condition were also asked questions from the OPCS Disability Survey (Appendix 2, questions 174-175) to measure the distress caused by tinnitus[7].

A set of questions (Annex 2, questions 130-136) developed by Goldberg[8] to detect anxiety and depression were administered to respondents reporting "stress".

At the end of the interview respondents were asked for their permission for an HSE doctor to contact their GP, to collect some further information about their illness. If their GP was not aware of their condition, the respondents were asked for their permission to contact the doctor or specialist who treated them. Those that agreed were asked to sign a consent form (Annex 3). Face-to-face interviewers obtained a signature at the end of the interview and telephone interviewers posted a form to the respondent. The return of these posted forms was monitored, and two reminders were issued.

2.2.3 Response rates

The overall response rate for the follow-up survey was 61%; that is, interviews were obtained for 1735 of the 2845 people eligible to be interviewed for the follow-up survey (Figure 3). A total of 832 (29%) people refused to take part in the follow-up interview and 288 (10%) people could not be contacted. When the remaining people were interviewed a further 184 (6%) people who originally said they had a work-related illness changed their mind and said they did not have a work-related illness. Information was collected from a total of 1 551 (55%) people with one or more work-related illnesses.

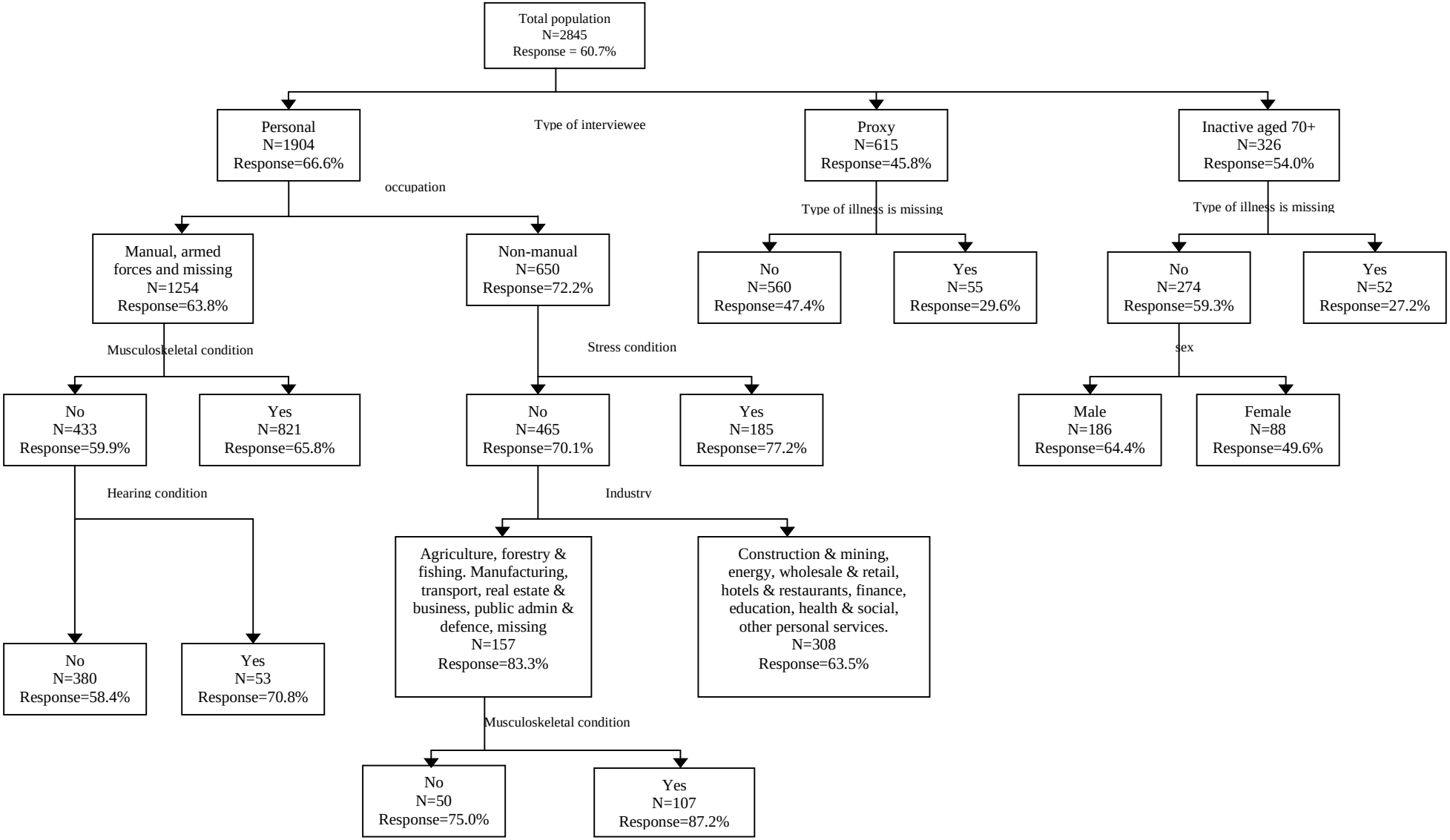
Table 1 shows the percentage of people who dropped out at each stage of the survey by whether their LFS interview was personal or proxy. None of the follow-up interviews were allowed to be carried out by a proxy. A higher proportion of the people who had been represented by a proxy could not be contacted compared with first person interviews (20% compared to 11%). There was also a higher proportion of cases where the proxies said the respondents had a work-related illness but when the respondents were contacted they did not have a work-related illness (14% compared to 6%). A large proportion of people (23/54) who originally said they were unsure as to whether they had a work-related illness but consented to a follow-up changed their mind when interviewed and said that they did not have a work related illness. Within this table the 'economically inactive aged 70 years or over' were treated separately since they are a mix of both personal and proxy, this was due to this group being treated separately for interviewing purposes within the LFS and the personal/ proxy status of the interviewee not being recorded.

Table 2 shows the type of illness the respondent reported at the screening stage by whether the person completed a follow-up interview. The overall proportion of people who could not be contacted at the follow-up varied by disease from 10% to 17%. The highest contact rate was for people with a hearing problem. These people, when possible, were interviewed face-to- face rather than by phone because of their illness and hence the higher contact rate. The proportion of people who changed their minds about whether they had a work-related illness ranged from 5% to 12%, the lowest proportions were for hearing problems (6%) and stress, depression or anxiety (5%). The proportion of people who changed their minds about what type of work-related illness they had varied by disease from 4% for musculoskeletal cases to 34% of people who originally said they had an "other problem". Overall, the proportion of illnesses which were originally reported and confirmed as the correct illness was highest for musculoskeletal conditions (75%) and lowest for "other problems" (40%).

2.2.4 Adjusting for non-response at follow-up

If the response rate in a survey varies between identifiable groups in the population then a weighting scheme that accounts for this variation is needed to avoid biased results. To identify whether there were groups with significantly different response rates in the SWI survey, data on both the respondents and non-respondents was needed. Data from the LFS was therefore used to help identify such groups. A large number of variables from the LFS were analysed to identify ones that related to whether or not people responded to the follow-up interview. Groups with significantly differing response rates were identified using Chi-squared Automatic Interaction Detection (CHAID)[9]. This technique identifies subgroups of the population between which the response rate differs to a statistically significant extent. Figure 4 shows the groups which CHAID identified as having significantly different response rates. The adjustment for non-response involved multiplication of the weighted data (see section 2.1.6) by the reciprocal of the response rate within groups identified.

Figure 4: CHAID tree showing response rates in statistically distinct groups, used to adjust for non-response



Cases who changed their minds i.e. they originally said they had a work-related illness but when followed-up they said they did not have a work-related illness, were treated as respondents since they did respond to the follow-up.

2.3 QUESTIONNAIRE TO DOCTOR OR SPECIALIST

At the end of the follow-up interview, respondents with one or more illnesses that a doctor was aware of, were asked for their permission for a doctor from HSE to contact their doctor. The information the doctors provided was used to code illnesses to the correct illness group and to help decide whether the illness was work-related.

2.3.1 Fieldwork

Written permission was obtained from respondents by asking them to sign a consent form to contact the doctor who was aware of their illness (Appendix 3). The doctor could be either their own GP, a works doctor or a hospital doctor. The doctor was then sent a postal questionnaire (Appendix 4) along with a copy of the respondents signed consent form for each illness that the respondent had reported the doctor to be aware of. A set medical fee was paid to the doctors for providing the medical information. Two reminders were sent to non-respondents.

2.3.2 Questionnaire

To help the doctors identify the relevant consultation they were provided with a copy of the respondent's answers to certain questions, these were descriptions of: the illness; the date of the most recent consultation for this illness; the occupation; the industry and how the illness was caused. The doctor was then asked to confirm whether they had a record of the illness or even the patient, whether the patient had accurately described their illness and whether the doctor thought that the illness was work-related (Appendix 4).

2.3.4 Response rates

A respondent could have reported up to four work-related illnesses and the doctor may be aware of all of these illnesses, only some of the illnesses or none of them. Table 3 shows the proportion of illnesses within each disease group which doctors were aware of, overall, doctors were aware of 94% (1840/1956) of all the illnesses reported. The proportion of respondents consenting to HSE contacting their doctor varied between illnesses; the lowest proportion consenting was for those with a skin disease (51%) and the highest proportion was amongst those with a back and lower limb condition (79%), overall 66% of respondents consented. The overall response rate which is based on the number of illnesses for which a questionnaire was sent to a doctor was 86%, again this percentage varies by disease.

2.4 CONTROL SURVEY

To help identify features of the job which may be associated with a work-related illness a control population was asked the same questions on working conditions that appeared in the follow-up questionnaire for sufferers of work-related illness. In addition, to aid interpretation of the main data set, the same questions on chest problems, smoking and general health were asked so that background levels of certain health problems could be determined. The control population questions were included in a module of the ONS' Omnibus survey.

2.4.1 Omnibus survey

The questions were included in a module of the Omnibus for two months: August and October 1995. The Omnibus is a multi-purpose survey developed by the ONS for use by government departments, and other public or non-profit making bodies. It is a vehicle for questions on topics too brief to warrant a survey of their own, and also for topics of immediate interest. Interviewing is carried out every month. Each month's questionnaire covers a variety of topics, reflecting users' requirements and a core of demographic questions.

2.4.2 Sample

Each month, interviews are conducted on approximately 2,000 adults aged 16 or over in private households in Great Britain. A random probability sample is selected for each month's survey. The sampling frame is the Postcode Address File of "small users" which includes private household addresses. A new sample of 100 postal sectors is selected for each month, with stratification by region, the proportion of households renting from the local authorities and the proportion in which the head of household is in Socio-economic groups 1-5 or 13 (i.e. a professional, employer or manager). The postal sectors are selected with probability proportionate to size and, within each sector, 30 addresses are selected randomly.

If an address contains more than one household the interviewer uses a standard ONS procedure to select just one household randomly. Within households with more than one adult member, just one person aged 16 or over is selected, using random tables. The interviewer will only interview the selected person, no proxies are taken.

2.4.3 Weighting

Because only one household member is interviewed, people in households containing few adults have a better chance of selection than those in households with many. A weighting factor is applied to correct for this unequal probability. Responses are first weighted by the number of adults in the household, to correct the proportions, and then adjusted to give a total sample size equal to the number of respondents actually interviewed. This is the weighting applied to the majority of modules, which use the individual adult as the unit analysis.

2.4.4 Field work

All interviews are carried out face-to-face by the interviewers trained to carry out ONS surveys. Advanced letters are sent to all the selected households giving a brief account of the survey. Interviewing is completed within a two-week period each month. Interviewers call at all selected addresses (unless refusal has been made beforehand in response to the advanced letter). The interviewer makes at least three calls at an address at different times of the day before abandoning the attempt to contact and interview the selected household.

As with all ONS surveys, a quality check on the field work is carried out through recall interviews with a proportion of respondents, to make sure that the interviews actually took place with those respondents and that the responses to questions are consistent.

2.4.5 Response rates

The small users' Postcode Address File includes some business addresses and other addresses, such as new and empty properties, at which no private households are living. The expected proportions of such addresses, which are classified as ineligible, is about 11-12%. They are eliminated from the set sample before response rates are calculated.

A person is classified as responding if he or she has completed both sections, or modules, collecting standard classificatory data, one of which is at the beginning and one at the end of the interview, and at least one of the client modules. A respondent may be ineligible for certain modules, or may not have answered every single question in some modules. Response rates are shown in Table A.

Table A: Response rates for August and October 1995

The response rate for August 1995 was 77% as shown below:			The response rate for October 1995 was 75% as shown below:		
		%			%
Selected addresses	3 000	100	Selected addresses	3 000	100
Ineligible addresses	309	10	Ineligible addresses	305	10
		%			%
Eligible addresses	2 691	100	Eligible addresses	2695	100
Refusals	335	12	Refusals	441	16
Informants incapable of interview	32	1	Informants incapable of interview	0	0
Non-contacts	261	10	Non-contacts	233	9
Interviews achieved	2 063	77	Interviews achieved	2 021	75

2.4.6 Control questions

The control population questions formed a module of the Omnibus survey in August and October 1995. The questionnaire repeated the questions on working conditions that appeared in the follow-up questionnaire, and also asked the same questions on chest problems, smoking and general health. Appendix 5 contains a copy of the questions.

The Omnibus survey also provided demographic and occupational information for each respondent.

2.5 REFERENCE PERIOD

Although screening questions were first administered in August 1995 (reference period for a work-related illness - September 1994 to August 1995) and ended in February 1996 (reference period March 1995 to February 1996), 1995 is the period mostly covered, and results in this report will be referred to as estimates for 1995.

3. DATA PREPARATION

3.1 DISEASE CODING AND GROUPING

3.1.1 Disease coding

Respondents reporting a work-related illness recorded details about the nature of their illness(es) in response to follow-up questions 4b, 4c, 4d, 12 and 15 (Appendix 2). Further information was provided by the respondent's doctor or specialist if they completed a questionnaire (Appendix 4, question 2). Using these descriptions, each illness was coded by HSE staff using the International Classification of Disease (version 9) basic tabulation list. Additional categories were introduced to provide for specific occupational diagnoses e.g. pneumoconiosis, vibration white finger. The condition "stress" with details of behavioural symptoms was commonly reported and these have been coded to the same category as depression and anxiety. "Eyestrain" was also commonly reported, and given its own category. For musculoskeletal disorders, where the area of the body affected was described, but no specific medical term was given, cases were coded according to the part of the body affected e.g. muscle or tendon disorder, ligament, cartilage or joint disorder.

3.1.2 Coding of lower respiratory disease with asthmatic or chronic bronchitis symptoms

Respondents reporting a lower respiratory disease were classified as having asthmatic symptoms if they had prolonged episodes of wheezing or whistling in their chest (positive response to question 149, Appendix 2) or had sudden attacks of wheezing or tightness in the chest that made them feel short of breath (positive response to question 151, Appendix 2) together with a positive response to at least two other questions (Q150 or Q152, Q153 and Q154, Appendix 2): breathing normally between prolonged episodes of wheezing or whistling in their chest or breathing normally in between sudden attacks of wheezing or tightness in their chest which made them feel short of breath; woken at night by wheezing or shortness of breath and wheezing and shortness of breath brought on by exercise, smoky rooms or exposure to cold air.

Respondents reporting a lower respiratory disease were classified as having chronic bronchitis symptoms if they had a cough and brought up phlegm on most days for at least three consecutive months each year (positive responses to questions 139 and 141, Appendix 2).

Table B shows lower respiratory diseases reported by asthma and chronic bronchitis symptoms present. Of respondents reporting a lower respiratory disease, three quarters had asthma symptoms, just over 40% had chronic bronchitis symptoms, and one fifth did not report symptoms meeting either criterion.

The lower respiratory analysis in the remainder of the report, unless stated, uses the classification defined above "asthma symptoms" and "chronic bronchitis symptoms".

Table B: Work-related lower respiratory disease by asthma and chronic bronchitis symptoms recorded

Disease	Sample cases	Asthma symptoms only	Chronic bronchitis symptoms only	Asthma & chronic bronchitis symptoms	No symptoms reported	No response to symptom questions
		%	%	%	%	%
Asthma	69	45	1	35	19	-
Chronic bronchitis	15	27	-	53	13	7
Emphysema	17	41	-	29	24	6
More than one of the above mentioned	9	11	-	89	-	-
Other lower respiratory disease	32	28	9	28	31	3
All illnesses	142	37	3	38	20	2

3.1.3 Musculoskeletal disorder site codes

Using the disease descriptions provided and the respondent's answer to question 38 of the follow-up questionnaire, "What part of your body was affected by your complaint?" each musculoskeletal disorder was coded according to which areas of the body were affected: back; upper limbs or neck (ULN); lower limbs (LL); back and ULN; back and LL; ULN and LL; back, ULN and LL; internal and whole body. The main analysis in this report is however based on three categories as well as musculoskeletal disorders as a whole: all cases where the back was affected, described as "back affected"; all cases where the upper limbs or neck were affected, "upper limbs or neck affected" and all cases where the lower limbs were affected, "lower limbs affected".

3.1.4 Coding of illnesses ascribed to "stress"

Many respondents reported, unprompted and generally in response to question 15 of the follow-up questionnaire, "Can you describe in a few words how your work caused your complaint/made your complaint worse?", that their physical illness was caused or made worse by "stress" at work. Positive responses to the interviewer check at question 16 of the follow-up questionnaire, "Did the respondent describe stress at work as causing or making the complaint worse?", provided a flag for physical conditions ascribed to "stress" and this was used when defining disease groups for analysis.

3.1.5 Disease groups

Two sets of disease groups have been introduced within this report. The first includes diseases grouped into 15 mutually exclusive disease categories (Appendix 6). The musculoskeletal disorder group has been expanded into a further 8 categories, to reflect the main part of the body affected (see section 3.1.3), forming a total of 22 disease groups.

Appendix 7 shows the second set of disease groups. These 10 groups form the basis for the main analysis in this report. In addition, results are shown for the "stress" groups, "stress, depression or anxiety" and "stress ascribed illnesses" (see section 3.1.4), for the lower respiratory diseases, "chronic bronchitis symptoms" and "asthma symptoms" (see section 3.1.2 for definitions) and the musculoskeletal disorders, "back affected", "upper limbs or neck affected" and "lower limbs affected" (see section 3.1.3 for definitions). There are thus a total of 17 groups. The main 10 groups are mutually exclusive, but the two lower respiratory groups and the three musculoskeletal groups are not. An individual with a condition affecting their back and lower limbs will be included in both the corresponding disease categories.

3.2 CASES EXCLUDED FROM THE MAIN ANALYSIS

3.2.1 Treatment of accidents

Health and safety issues do not divide cleanly into those concerned with "safety" and those concerned with "health". Although for a wide range of issues the distinction is clear, there is an area of uncertainty which mainly relates to musculoskeletal conditions and the impact of manual handling on these conditions. This uncertainty is reflected in the responses people gave in this area. There were 321 reported illnesses which could potentially be ascribed to "accidents" either because the respondent said "yes" to the question "Was your (illness) (caused/made worse) by an accident at work?" (Appendix 2, question 17), or because their description of the illness and how it was caused indicated an accident-like incident. Table C shows how these two criteria related to each other. The shaded cells are those which should logically be empty if a consistent view of what constitutes an accident was applied to all descriptions of these illnesses.

Table C: Reports indicating an accidental cause either from response to the accident question, or implied by the "How caused" question cross tabulated by these two criteria

Assessment based on "How caused" question	Respondent's answer to accident question		Total
	Yes	No	
Not manual handling, not an accident	33		33
Manual handling (no accident)	39		39
Manual handling accident	42	25	67
Accident (not manual handling)	173	5	178
Manual handling and non-manual handling accident	4		4
Total	291	30	321

The illnesses in the shaded cells are characterised in Table D overleaf.

In the main analyses presented in this report, physical (post traumatic) illness arising from non-manual handling accidents (i.e. the 178 cases in the fourth line of Table C) have been excluded. The effects of manual handling accidents have been included, and, as can be seen from the table, the ways in which people describe the effects of heavy lifting, and the role of "accidents" in this is far from consistent. The post-traumatic stress cases (first line of Table D) have been included. Most of these arise from attacks at work, one was related to a near-miss accident.

For part of the survey period the main screening question in the LFS was preceded by questions designed to identify reportable workplace accidents occurring in the previous 12 months. In this period, if the respondent had reported such an accident, the illness screening question was qualified by the words "...apart from the accident you have just told me about.." However, the LFS only carries these workplace accident questions in the winter quarter (November to January), and outside this period the illness screening question could elicit a positive response purely because of a workplace accident in the previous year. Since the acute effects of accidents were not the object of the present survey, all responses arising from an accident in the 12 months prior to the interview have been excluded (see Table 5).

Table D: Description of illnesses in shaded cells of Table C

Response to accident question	Response to "How caused" question	Number of responses	Typical scenarios
Yes	Not manual handling not an accident	33	Post traumatic stress disorder after attack. In some other cases, an acute illness episode seems to have been regarded as an "accident"
Yes	Manual handling (no accident)	39	Heavy lifting with no reference to or description of a significant incident.
No	Manual handling accident	25	Heavy lifting with mention of specific incident
No	Accident (not manual handling)	5	Accidental injuries, unclear why the accident question was answered negatively. Possibly because they arose out of perfectly routine activities (e.g. grit in eye from grinding wheel, trapped fingers closing gate)

3.2.2 Reliability

The main aim of the survey is to measure the numbers and types of illnesses caused by people's work. What the survey actually records is the opinion of individuals who believe themselves to be so affected. This is of interest and importance in its own right, but cannot be taken directly and at face value as an indicator of the 'true' extent of work-related illness. People's beliefs may be mistaken: they may ascribe the cause of illness to their work when there is no such link; and they may fail to recognise a link with working conditions when there is one.

The reliability of an individual's report that a particular illness is caused by their work will be determined primarily by the evidentness of the causal link at an individual level. This will vary from case to case, but the proportion of individually evident cases will be generally higher for some categories of disease (e.g. headache, dermatitis) than for others (e.g. musculoskeletal conditions); and lowest for diseases for which occupational causes are not observable at the individual case level even where they exist (cancers, heart disease). Acute and - especially - episodic illnesses, where occurrence of disease can be observed by the individual to be associated with some aspect of their work will be more reliably reported. For chronic conditions it will be generally more difficult for the individual to know reliably whether their work was the - or a - cause of their illness. There are some exceptions to this last statement: specifically occupational diagnoses (such as pneumoconiosis and vibration white finger) imply that some expert assessment of the case as occupational has taken place; and where the work/illness link is straightforward (some chronic poisoning, noise-induced hearing loss), individuals' view of the linkage will probably be fairly reliable.

3.2.3 The meaning of "caused" and "made worse"

A distinction was made in the survey between cases of illness directly caused by work, and those made worse. This distinction was based on responses to the question:

> "Was your [complaint] caused by your work, or did your work simply make it worse?"

In strict logic, three patterns of work/illness relationship can be defined: causation (the illness would not have occurred without the work effect); contributory causation (work is one of several factors directly affecting the disease process: absence of the work effect could influence the onset and course of the illness, but not remove the disease altogether); and symptom exacerbation (the effect of the illness is made worse by work, but work does not contribute to the underlying disease process).

In individual cases, these distinctions may be difficult to draw, and more than one may apply at the same time. Cases for which the effect of work operates *only* on symptoms are arguably not part of work-related illness: they reflect the impact of health on work rather than that of work on health. In terms of responses to the survey question quoted above, the 'cases made worse' group will cover both contributory causation and symptom exacerbation cases.

The line between the "caused" and "made worse" categories is probably different for different disease types. For example, an infection "caused" by work will be one where the infective agent was transmitted in the work environment; "made worse" cases will be those where the infection was acquired elsewhere, but working conditions exacerbated the symptoms. On the other hand, conditions with a chronic aetiology or conditions which are essentially symptom syndromes with no definite underlying pathology, the distinction between "caused" and "made worse" is pretty unclear and what people probably mean is something more like "work has a lot to do with it" or "work has a bit to do with it".

The questionnaire for doctors (Appendix 4) attempted to draw these distinctions more precisely. The doctors were asked to rate the following three statements about the work/illness link reported by their patient on a five-point scale from *Definitely* to *Definitely not*:

> The patient's work is the main underlying cause of their illness.
>
> The patient's work is a contributory underlying cause of their illness.
>
> The patient's work is a cause of symptoms of their illness.

The doctor's responses are summarised in Tables 3, 4a and 4b, and are discussed in detail in section 2.3.4. Overall, doctors supported their patients' assessments. Of the 820 work/illness links where we have a doctor's view, 80% rated a causal link as possible or better, and only 11% believed that a work link was unlikely or worse on all three criteria. It is interesting that doctors tended to corroborate cases at a causal level even when the patient had only claimed the illness to be made worse. Tables 4a and 4b compare the doctor's responses for cases reported by respondents as *caused* with those reported as *simply made worse*. The doctors assessed a lower proportion of the *made worse* cases as causally linked to work, but even for these they assessed a causal link as possible or better for two thirds (68%) of cases.

3.2.4 Identification of doubtful cases

Mistaken ascription will be more likely for some categories of disease than others, but there are few for which at least a contributory occupational cause is so unlikely that such cases could be ruled out without consideration of the reported link with work. We therefore reviewed all the individual responses and categorised each reported work/disease link into the following groups:

1. The reported link is plausible as the main underlying cause of the illness;

2. The reported link is plausible as a contributory cause of the illness;

3. The reported link is unlikely to be causal, but work may well exacerbate disease symptoms;

4. Any physical condition ascribed to "stress". (See next section for a full discussion of this category);

5. The link between the illness and the respondent's work is not likely to be causal, but work demands have revealed a pre-existing condition. (This category was mostly applied to reports of short sight and other kinds of refractive error reported as being caused by work with display screens);

6. Not a work-related condition.

The main data items used were the disease descriptions, occupation details, dates and the response to the question:

> "Can you describe in a few words how your work caused your [illness]/made your [illness] worse?"

For both of these items we had interviewers' written summaries of the responses. Where a doctor's response was available, the doctor's view was taken into account (though not necessarily taken as decisive).

3.2.5 Illnesses ascribed to "stress"

There is a wide range of diseases for which "stress" is popularly believed to be a contributory cause. The proper interpretation of these reports depends on the answer to two questions:

1. Is there reasonable scientific evidence that "stress" can cause illness of kind reported?

2. In an individual case, is the sufferer in a position to know whether *their* illness is the result of stress?

If the response to both these questions is "yes" (for example, an acute effect such as head- ache), then the report can be taken at face value: the respondent suffers from work-related headaches caused by stress.

For diseases with a gradual onset it will more usually be the case that the answer to the second question will be "no". For example, while there is good evidence that working conditions do affect the risk of circulatory disease in people exposed to them[10], the identification of individual cases as due to work is generally not possible. The affected individual has no way of observing the effect of working conditions on the underlying disease process (though the effect on their experience of the disease may be very evident). Estimates of the extent of work-related circulatory disease can only properly be based on controlled epidemiological study of working populations in which other risk factors are appropriately measured and controlled for[11]. Self reports of heart disease caused by stress may be correct, but cannot be regarded as a reliable basis for estimating the extent of work-related heart disease. However, it is reasonable to interpret such reports as indirect reports of stress at work.

The third possibility is that there is no reason to believe that stress can lead to the disease in question. For such cases the report should not be taken at face value, since it is most likely that the reported illness is not work-related. Again, it is reasonable to interpret such reports as indirect reports of stress at work.

3.2.6 Criteria for review

The case review had two main purposes: to identify and exclude cases which were clearly not work-related, and to attempt to draw a line between cases where a work link was causal, and those where the impact of work was purely symptomatic. The end result is still essentially shaped by respondents' perceptions. We did not have the information to convert the survey results into what might have emerged from a "hands-on" occupational health assessment of each reported work/illness link.

Table E shows the general criteria used to exclude cases from the causal categories, together with some more specific illustrative examples. Where individual cases are cited, details have been changed or made less precise to maximise their anonymity.

Table E: General criteria for exclusion from causal categories

Criterion	Examples
The reported exposure is not an established cause of the illness	Bladder cancer, not in a recognised risk industry and with no exposure cited Pneumonia caused by work in cold, wet conditions Raynaud's disease caused by data entry work
The account of the link, or the timing of onset in relation to the linked job implied that there was a pre-existing condition	Congenital conditions
The level of reported exposure does not appear to be a sufficient cause of the illness	An outdoor worker with deafness caused by low flying aircraft Ear or hearing problems caused by working in a draught
Non-work cause	Depression due to losing job A traumatic event outside work makes some aspect of work intolerable

Table F (overleaf) summarises the disease-specific criteria for accepting a work/illness link as plausibly causal, or as more likely to be symptomatic only. The line between these categories is an uncertain one, and others may have made different judgements on individual cases than we have. The accounts given by some respondents (or the record of them made by the interviewers) were in some cases unclear. Where there were uncertainties we have made the best interpretation we could. The impact of work on pre-existing conditions was accepted as causal if the reported work is likely to affect the underlying disease process.

Table F: Disease-specific criteria for causal linkage

Condition	Exposures accepted as plausibly causal	Exposures judged to produce symptomatic exacerbation only
Lower respiratory disease		
	Any potentially allergenic, fibrogenic or irritant respirable substance	Cold, wet
		Physical exertion
Dermatitis and other skin conditions		
	Any potentially allergenic or irritant substance	Wearing of protective footwear causing verrucas
Frozen shoulder/tenosynovitis/RSI/golfer's elbow/tennis elbow		
	Repetitive work	No exclusions on basis of exposure
Neck and back conditions/spondylitis/ spondylosis/ arthritis/ osteo-arthritis/disc problems		
	Heavy lifting or other heavy manual work	Exposure to cold/wet conditions
	Awkward posture leading to tension neck	Awkward posture with no mechanical loading (e.g. person with spondylosis sitting in uncomfortable chair)
Abdominal hernia		
	Heavy lifting or other heavy manual work	No exclusions on basis of exposure
Coronary disease[#]		
	Physical exertion leading directly to a heart attack[*]	Physical exertion provoking angina
Varicose veins		
	Long periods of standing	No exclusions on basis of exposure
Gastric ulcer, diverticulitis		
	None reported[#]	Shift work, irregular eating imposed by work patterns

continued...

Table F (continued)

Condition	Exposures accepted as plausibly causal	Exposures judged to produce symptomatic exacerbation only
Upper respiratory disease		
	Continual talking causing laryngitis	Draughts
	Any potentially allergenic or irritant respirable substance	
Nervous system disease		
	None reported	Epileptic attack triggered by work factor
Endocrine & metabolic disorders		
	Problems of diabetic control due to work patterns	Overworking exacerbating diabetes
	Side effects of anti-malarial medication taken for work purposes	
Infections		
	Infection, including food poisoning, contracted at work	Hot and poorly ventilated room reported as giving rise to frequent infections
Eye conditions		
	Dry eye Arc eye	VDU use leading to: Lazy eye Refractive error
Other diseases		
	Bladder cancer in rubber worker Skin cancer in outdoor worker Heat stress	Work pressures exacerbating manic depression

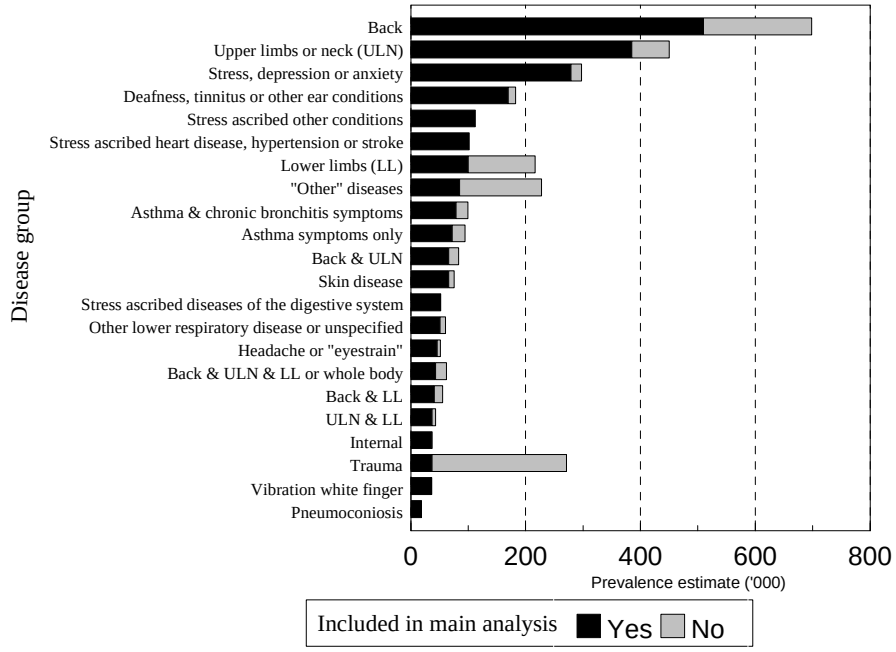
Notes
 # Large numbers of cases in the circulatory and digestive disease categories were ascribed to "stress". These were included as a separate category, see section 3.2.5
** Two sample cases, corresponding to a nominal estimate of around 3 000.*

3.2.7 Outcome of review

The outcome of the case-by-case review is summarised in Tables 5 and 6. The survey produced a total of 1 956 self-reported work/illness links. Of these, 522 (27%) were excluded from the main analyses: 105 accidents in the last 12 months, 188 non-manual handling accidents occurring more than 12 months before the survey, 52 reports which were not work-related, 163 where the work link was judged to be symptomatic only, and 14 where work was judged to have revealed rather that caused the reported condition (these last two categories both counted in the fifth column of the table).

The impact of exclusions on individual disease categories is illustrated in Figure 5. The disease category most affected is trauma, due to the exclusion of most (80%) accident reports. Of the other categories "other" diseases is the most affected (60% excluded), followed by conditions affecting only the lower limbs (52% excluded, of which 30% were due to accidents). No other diseases had more than half the corresponding reports excluded. Musculoskeletal conditions affecting the back and lower respiratory diseases had between 20% and 30% of reports excluded, mostly due to the work link being judged to be symptomatic only.

Figure 5: Estimated prevalence all reported work-related illness by disease group, and whether included in the main analysis



The impact of these exclusions on prevalence estimates is shown in Table 7. The estimated prevalence is reduced from 2.6 million to 2 million, a drop of 24%. This is less than the 27% of individual reports excluded because respondents reporting multiple work-related conditions are only excluded if *all* their reports fall in excluded categories. The preliminary results reported in "Health and Safety Statistics 1996-97" gave an overall prevalence estimate of 2.5 million. This estimate excluded accidental injuries in the previous year, but made no further exclusions.

3.3 "HOW CAUSED?" and SUBSTANCE CODING

These coding frames were derived from respondents answers to question 15 of the follow-up questionnaire, " Can you describe in a few words how work caused or made your complaint worse?" and questions 20 and 21, "May I check, was your complaint caused by a substance used or present in the workplace?" and "What was that substance (or substances)?". Appendix 8a shows the "How caused?" coding frame and Appendix 8b shows the substance coding frames. Some illnesses have been assigned more than one "How caused?" or substance code.

3.4 OCCUPATION CODING

Occupations were coded by ONS using the Standard Occupation Classification[12] (SOC). The SOC codes have been grouped into 29 categories, with an additional category, "missing" where occupational details were not provided, for whatever reason, at interview. Groups were chosen to bring together occupational units with similar working conditions. In some cases sample numbers were too small to warrant a separate group, and "other" categories have been formed containing a mix of jobs e.g. other processing. The armed forces has been treated as a separate group, as the sampling frame does not cover a large proportion of current members of the armed forces because they were either serving abroad or not resident in private households. Appendix 9 provides details of occupation groups.

3.5 ANALYSES BY OCCUPATION

The statistical power of the present survey for examining rates of individual disease categories for individual occupations is limited. Nevertheless, such data is of considerable interest and value, since it can help define priorities for prevention and the delivery of other occupational health services in different occupations.

A further difficulty with presenting data by occupation is that population denominators are not available for reported cases not ascribed to the individual's current or most recent job, nor for any cases ascribed to a job held more than eight years before the survey (since the LFS only asks respondents about jobs they have held up to eight years ago).

The occupation-specific tables in this report therefore show data in two ways. For all subjects employed in the last eight years, sample cases ascribed to the respondent's current or most recent job are shown by occupation and used to calculate occupation specific rates. These rates are not shown for individual occupations, but the occupations are ordered by the disease rate and combined into groups so that the average rates for the groups of occupations are significantly different. The groupings were identified by CHAID[9], and represent, in a statistical sense, the best available grouping of the occupations. No occupation in a group has a rate that is significantly different from the group average rate; and moving any occupation from its assigned group to another group will increase the variability of its new group by more than it decreases the variability of its original group.

The resulting groupings represent a statistically stable picture of the range of rates of the disease in question across different occupations. The makeup of the groups is less certain, although they represent the best grouping of the particular observations made in the present survey, a repeat of the survey on a different sample might well provide a different grouping in detail, particularly for the smaller occupations. In addition to the data on occupational rates, the occupation tables show the total of sample cases ascribed to each occupation, and the corresponding national prevalence estimate. Great caution must be observed in the use of these estimates, since many are based on very few observations. The uncertainty of these estimates is indicated by their 95% confidence intervals, and these should be quoted in preference to the central estimate whenever there are less than 30 sample cases.

3.6 WORKING CONDITIONS ANALYSIS

Respondents in the control population were asked a selection of questions about different aspects of their job and working conditions that could be associated with the occurrence of work-related illness. The questions were only administered to respondents employed at sometime in the 10 year period prior to the interview. The questions were linked to the respondent's current job if they were in employment when interviewed, and their last job if not. Findings on self-reported working conditions amongst current workers were published in 1997[13]. The present report uses this information as a baseline, examining whether individuals suffering from certain work-related illnesses had a higher level of exposure to certain job characteristics than the general working population. In the analysis, comparisons are made between respondents reporting a work-related illness, in the main survey, caused by a job in the last ten years, with respondents employed in the last 10 years in the control population. Information about subjects reporting a work-related illness caused by a job over 10 years ago is also shown, but no information is available for comparison.

These comparisons are expressed in two ways: first as a relative risk (RR) comparing all those reporting some exposure with those never exposed; secondly as a relative risk for each level of the risk factor in relation to the lowest level at which at least one case was reported (nearly always the "never exposed" level). A relative risk of 2 means that the effect is twice as likely to occur at that level of the risk factor than at the lowest (reference) level. Where there are more than two levels of the risk factor a statistical test for a trend across the risk levels was applied. Trends were assessed across all exposure levels, and also excluding the "never exposed" category. The two tests usually gave the same result, but where there was a difference the all levels test is shown in the table, with the alternative test shown as a footnote.

The relative risks were calculated using the Mantel-Haenszel method on data stratified by the 12 age by sex by full time/part time strata. The test for trend was assessed using a linear scoring of the factor levels, with statistical significance estimated by sampling from the permutation distribution of the test statistic. Calculations were done using StatXact statistical analysis program[14].

The RR estimates shown in this report relate to broad disease groups and to single exposure factors. Future analyses will examine the joint effects of several exposures. It must be remembered that an RR is a measure of statistical association, and does not necessarily represent a causal relationship. Also, a degree of bias should be expected - particularly for the more obviously relevant exposures - since the level of exposure to these work factors is being reported by respondents who have already identified their illness as work-related. Future analyses will try to assess the extent of this bias by examining the internal consistency of the RRs implied by these self-reported exposures at individual level, the occupational prevalence of the same exposure factors in the control survey and the prevalence of self-reported work-related illness in different occupation groups.

3.7 STRESS AND ANXIETY SCORES

The set of questions listed below in Table G (see also Appendix 2, questions 130 to 136 and Appendix 5, questions 89 to 92), developed by Goldberg[8] to detect anxiety and depression, were administered to respondents reporting stress, anxiety or depression or a physical condition ascribed to "stress", and to respondents in the control population who had ever been employed. Total anxiety and depression scores were calculated for each subject, and mean scores for respondents reporting stress, depression or anxiety, a physical condition ascribed to "stress " and for the general working population.

Table G: Anxiety and depression scale questions[8]

Anxiety scale

Have you suffered from any of the following?

(Score one point if response "yes")
1. Feeling keyed up, on edge?
2. Worrying a lot?
3. Irritability?
4. Difficulty relaxing?

(If "yes" to two or more of above, go on to ask:)
5. Sleeping poorly?
6. Headaches or neck aches?
7. Trembling, tingling, dizzy spells, sweating, diarrhoea?
8. Worrying about your health?
9. Difficulty falling asleep?

Depression scale

Have you suffered from any of the following?

(Score one point for each "yes")
1. Low energy?
2. Loss of interests?
3. Loss of self-confidence?
4. Feeling hopeless?

(If "yes" to ANY question, go on to ask:)
5. Difficulty concentrating?
6. Loss of weight (due to poor appetite)?
7. Waking early?
8. Feeling slowed up?
9. Tendency to feel worse in the morning?

The results section compares the distribution of anxiety and depression scores and the mean scores, for individuals reporting 'stress, depression or anxiety' or a physical condition ascribed to "stress", with those of the control population. This was completed by adjusting each of the three data sets so that each had the same profile by age and sex as individuals suffering from work-related "stress" (any individual suffering from stress, depression or anxiety or a physical condition ascribed to "stress"). The adjustment was based on the weighted data.

3.8 STANDARD ERRORS

Estimates based on sample surveys are subject to a margin of error. The main thing which determines the width of the margin of error around a given estimate is the number of sample cases it is based on. Errors on estimates involving some form of measurement of individuals (e.g. days of sick leave) are also affected by the variability of the measure from person to person. All errors are also affected by aspects of the survey design, in particular whether the sample is stratified or clustered. The LFS is both stratified (by post code sector) and clustered (at household level).

The sampling errors in this report are expressed as 95% confidence intervals. These represent a range of values which has a 95% chance of containing the true value. The confidence intervals were calculated using the survey analysis module of the Stata statistical analysis package[15] and take account of sampling weights and household clustering. Because of confidentiality concerns, ONS did not make available the information on stratification, so this element could not be allowed for. The methods used by Stata can produce a negative lower confidence limit for estimates based on very few sample cases. These have been set to zero. Confidence intervals for zero estimates (i.e. where there were no sample cases) have been derived on the assumption of an underlying Poisson distribution.

4. RESULTS

The results that follow exclude cases described in section 3.2. All prevalence estimates, rates and percentages recorded in the tables described in this chapter are based on the "weighted " data (see sections 2.1.6 and 2.2.4).

4.1 OVERALL PICTURE

An estimated 2 million (CI: 1 897 000 to 2 136 000) people in Great Britain were suffering from a work-related illness in 1995, 4.8% (CI: 4.5% to 5.1%) of individuals who have ever worked. An estimated 339 000 (CI: 291 000 to 387 000) adults were suffering from more than one such condition (Table H).

Table H: Estimated prevalence of people suffering from multiple work-related illness

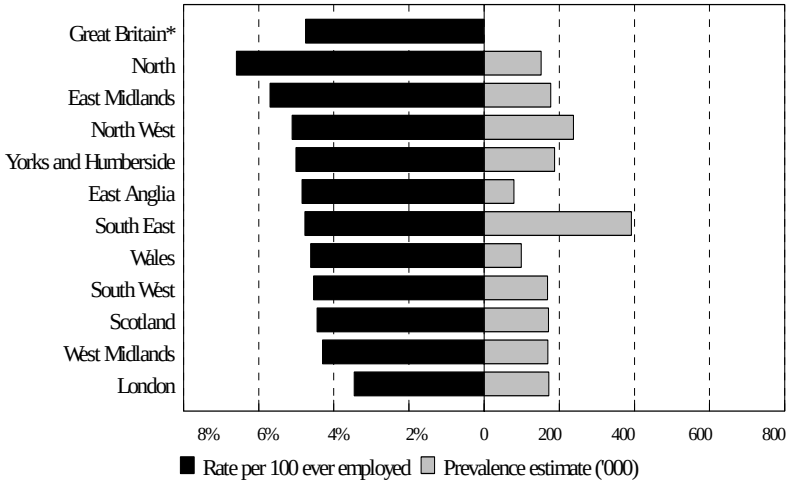
Number of illnesses	Sample cases	Prevalence estimates (thousands)		
			95% C.I.	
		Central	lower	upper
1	984	1678	1569	1787
2	165	271	228	314
3	36	63	42	84
4	3	*5*	*0*	*10*
All persons	1188	2017	1897	2136

Note: Figures in italics are estimates based on 30 or fewer sample cases

Table 8 shows the estimated prevalence of work-related illness and rates per 100 ever employed, by age and sex. An estimated 1.2 million (CI: 1 110 000 to 1 295 000) males and 0.8 million (CI: 741 000 to 887 000) females were affected: 5.8% (CI: 5.4% to 6.3%) of males and 3.8% (CI: 3.4% to 4.1%) of females ever employed. Rates were highest for both males and females in the older working age group (45 years to retirement age): 8.5% (CI: 7.5% to 9.4%) and 6.8% (CI: 5.9% to 7.7%) respectively. Across all age groups, rates for males were higher than those for females, on average males reported 50% more work-related illness.

The Northern region had the highest rate of work-related illness (Table 9 and Figure 6), an estimated 6.6% (CI: 5.2% to 8.0%) of people ever employed, living in the region. Other regions with rates exceeding 5% were the East Midlands (5.8%, CI: 4.6% to 6.9%) and the North West (5.1%, CI: 4.3% to 6.0%). The South East (excluding London) had the highest prevalence of work-related illness (393 000, CI: 340 000 to 446 000), but the rate, 4.8% (CI: 4.2% to 5.4%), was of the same order as the rate for Great Britain as a whole.

Figure 6: Estimated prevalence of work-related illness and rates per 100 ever employed, by region



*The national of prevalence estimate (2.0 million) is too large to be conveniently shown in this figure

The estimated prevalence of work-related illness by disease are shown in Table 10. The diseases listed have been arranged into 15 main disease groups (see section 3.1.4). Figure 1 shows the estimated prevalence of work-related illness by disease group and musculoskeletal disorders broken down by affected site.

Musculoskeletal disorders were by far the most commonly reported work-related illness, 57% (679/1188) of respondents reporting a work-related illness, affecting an estimated 1.2 million (CI: 1 064 000 to 1 246 000) individuals. Among these, an estimated 5% suffered from more than one such condition. Table 56 shows the estimated prevalence for the musculoskeletal disorder group by the part of the body affected. Of the estimated number of people suffering from a musculoskeletal disorder, 44% (508 000, CI: 448 000 to 569 000) suffered from a disorder which *only* affected their back, 32% (375 000, CI: 324 000 to 425 000) *only* their upper limbs or neck and 9% (100 000, CI: 74 000 to 127 000) *only* their lower limbs. Some people, 16% (187 000, CI: 151 000 to 223 000) suffered from a condition which affected more than one part of their body or their whole body, and 3% (37 000, CI: 22 000 to 53 000) a condition which affected an internal part of their body e.g. hernia.

The second most commonly reported condition was stress, depression or anxiety, 14% (171/1188) of people reporting a work-related illness, affecting an estimated 279 000 (CI: 235 000 to 323 000) individuals. But a further 12% (145/1188) ascribed a physical condition to "stress" at work, so that in total the survey estimated that over half a million (515 000, CI: 456 000 to 574 000) individuals were suffering from stress, depression or anxiety, or from an illness they ascribed to "stress" at work (Table 14). Some 40% (63/158) of respondents reporting a physical condition ascribed to "stress" at work described their complaint as hypertension, heart disease or stroke, an estimated 102 000 (CI: 76 000 to 129 000) people and 21% (33/158) a disease of the digestive system, an estimated 52 000 (CI: 34 000 to 71 000) people.

Nearly 10% (113/1188) of those with a work-related illness reported a lower respiratory disease (202 000, CI: 163 000 to 241 000 - see Table 32). An estimated prevalence of 151 000 (CI: 117 000 to 185 000) individuals suffered from asthmatic symptoms, and 83 000 (CI: 58 000 to 109 000) chronic bronchitis symptoms (see section 3.1.2). Almost all those with chronic bronchitis symptoms also reported having asthmatic symptoms. The estimated prevalence for having symptoms of both types was 80 000 (CI: 55 000 to 105 000).

Deafness, tinnitus or other ear conditions formed 8% (99/1188) of individuals reporting a work-related illness, an estimated 170 000 (CI: 135 000 to 206 000) people. Over 80% (83/99) of these cases reported deafness, an estimated 140 000 (CI: 108 000 to 172 000) people and about one quarter (23/99) tinnitus, an estimated 41 000 (CI: 23 000 to 59 000) people.

Table 11 shows the incidence (new cases in the last 12 months) of work-related illness by disease group. One fifth (240/1188) of respondents reporting a work-related illness, an estimated 399 000 (CI: 346 000 to 451 000) individuals, were first aware of their illness in the last 12 months. An estimated 92 000 (CI: 66 000 to 117 000) people developed stress, depression or anxiety, in the last 12 months, about one third of people affected by this condition, and 180 000 (CI: 145 000 to 214 000) a musculoskeletal disorder, 16% of people affected. The percentage distribution of cases by duration of disease is shown in Table 12.

The occupational breakdown for all work-related illnesses combined is shown in Table 13. Overall, 70% of cases are linked to the sufferer's current or most recent job, and this ratio is similar across all occupations except coal mining, armed forces and metal processing which all show lower proportions. Only 16% (5/32) of 32 coal miner cases are linked to the sufferer's current or most recent job. The reasons for this are clear: the massive reduction in the coal miner population over recent decades, combined with the long latency of many of the illnesses that can arise in this job. Similar effects, on a smaller scale probably explain the low proportion (47/99) in metal processing. For armed forces cases 19% (5/26) are currently in the forces or have this as their most recent job. This is due to incomplete coverage of current members of the armed forces in the LFS.

The occupational prevalence rates fall into five groups with average rates ranging from 1.6% (CI: 0.8% to 2.5%) up to 39% (CI: 14 % to 63%). The highest risk group consists of a single occupation - coal mining - and the rate is based on only 5 sample cases, hence the very wide confidence interval. The next highest group covers four occupations (nursing, other processing, construction and teaching). The overall rate for this group of occupations is 7.5% (CI: 6.5% to 8.5%).

4.2 DISEASE

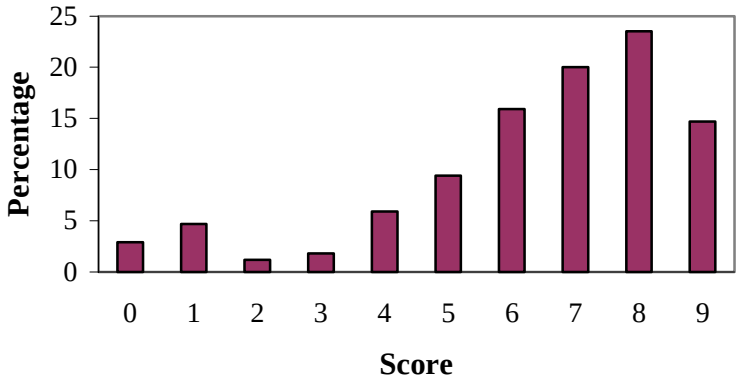
This section provides information for each of the 10 main disease groups.

4.2.1 "Stress"

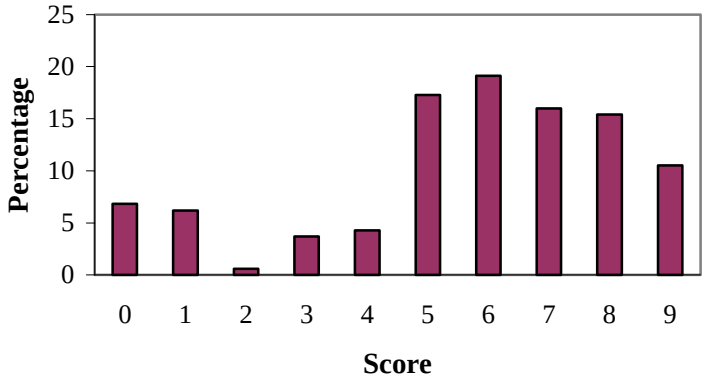
Over one quarter (316/1188) of respondents reported work-related stress, depression or anxiety or a physical condition ascribed to "stress" at work, implying a national prevalence of 515 000 (CI: 456 000 to 574 000) people in Great Britain (Table 14).

Figure 7 Frequency distribution of anxiety scores

a) Stress, depression or anxiety



b) Stress ascribed illness



c) Control population

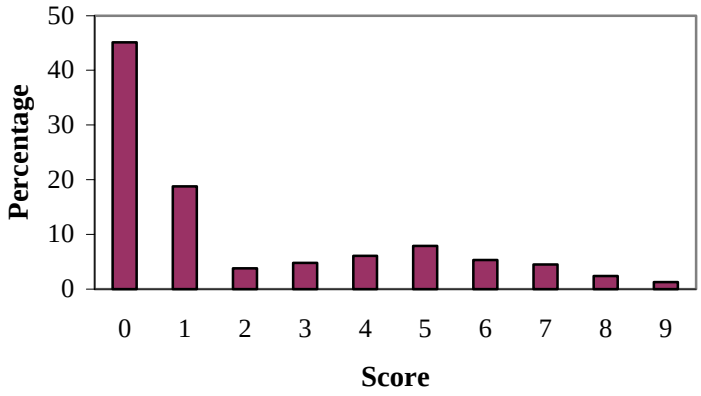
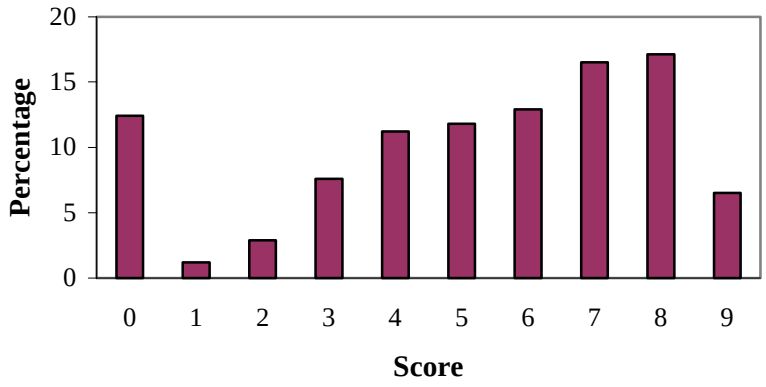
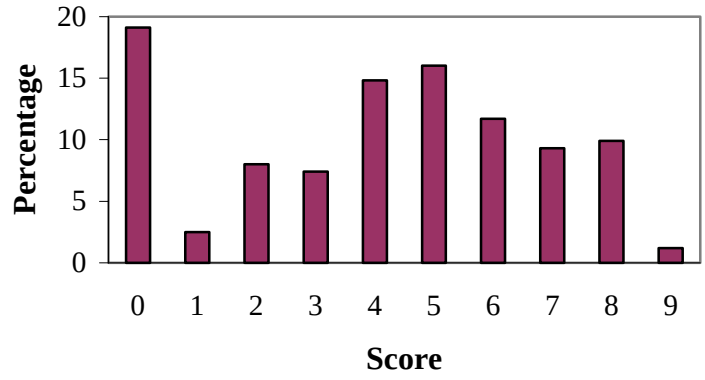


Figure 8 Frequency distribution of depression scores

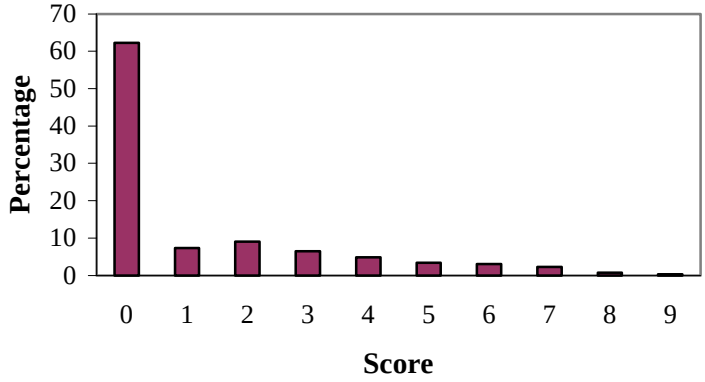
a) Stress, depression or anxiety



b) Stress ascribed illness



c) Control population



Out of the 316 respondents reporting stress, depression or anxiety or a physical condition ascribed to "stress", only 5 respondents did not complete the questions developed by Goldberg[8] to detect anxiety and depression (see section 3.7). The distribution of anxiety scores are shown in Figure 7 and Table 15a and depression scores in Figure 8 and Table 15b. Scores for the control population are also shown in the graphs and tables. In the paper by Goldberg[8] a critical score of five or more for anxiety and two or more for depression was said to predict a 50% chance of clinically significant illness. Combining the two work-related illness groups to form "stress" the results suggest that 80% of individuals reached this level for anxiety and 83% for depression, compared to 21% and 30% respectively in the control population. The control population has been adjusted to match the profile of sufferers of work-related "stress" by age and sex.

Figure 9 Average anxiety and depression scores for individuals reporting ' stress, depression or anxiety' or a ' stress ascribed' illness in the main survey compared with individuals who have ever worked in the control population

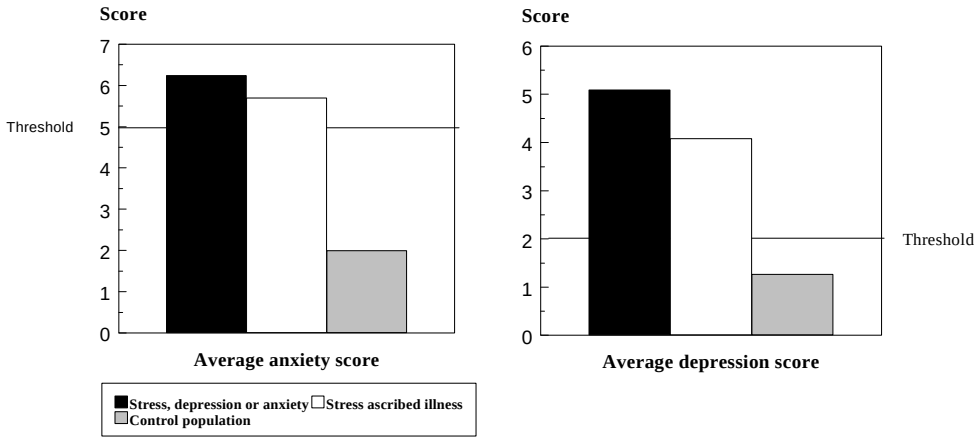


Figure 9 and Tables 15a and 15b show anxiety and depression mean scores for respondents reporting stress, depression or anxiety or a physical condition ascribed to "stress", and the mean score for the control population. The mean scores for respondents reporting work-related "stress" were three times the mean scores for the control population (6.0 for anxiety and 4.6 for depression compared to 2.0 and 1.3 respectively).

Stress is the reaction people have to excessive demands or pressures. In the work place it arises when people try to cope with tasks, responsibilities or other types of pressure connected with their jobs, but find difficulty, strain or worry in doing so. There are a number of factors in the workplace which give rise to stress and stress-related conditions, in particular where individuals are experiencing high demands or have little control over their work or inadequate support from management or violent or aggressive behaviour from members of the public. To determine whether individuals reporting a work-related "stress" condition had a higher level of exposure to certain working conditions than the general working population, "stress" sufferers in the main survey and respondents employed in the last 10 years in the control populations were asked whether and how often they: had too much to do; had too little work to do; worked to tight deadlines; had lack of control over their work; had inadequate management support and help when needed and had been physically attacked or threatened by a member of the public at work. Fuller details of the questions asked are given in Appendices 2 and 5.

Table16a-g compares the levels of exposure to selected aspects of work reported by sufferers of work-related "stress" compared with the general working population. The strongest association is shown with lack of "help and support from people in charge at work" (RR 6.4, CI: 4.9 to 8.4 - Table 16e). In other words sufferers of "stress" were 6½ times more likely to lack support than the general working population. Nearly 60% of sufferers working in the last 10 years lacked this support, and this would rise to nearly 70% if we assume that those who did not respond to the support question also, in fact, lacked support. The assumption is plausible since the RR for non-response is even higher (9.2). Strong associations were also seen for "working to deadlines" (Table 16c) and "having too much work" (Table 16a), both with RRs around 4½ and statistically highly significant positive trends with increasing frequency of exposure. At individual exposure levels, "always or almost always having too much work" showed a particularly high RR of 8.9. Over half of the cases reported this level of exposure.

Being physically attacked (RR 2.5, CI: 1.8 to 3.6 - Table 16f) or physically threatened (RR 3.0, CI: 2.3 to 3.9 - Table 16g) at work were also associated with "stress", and both factors had statistically highly significant trends with frequency of attack (or threat). These factors affect a minority of "stress" cases: about a third had been physically threatened, less than one fifth had been attacked.

Only small proportions (5% for main survey and 7.5% for control) reported having too little work for at least half of their working time, and this factor was inversely associated with "stress" (RR 0.7, CI: 0.5 to 0.9 - Table 16b).

In relation to being able to choose or change the order of tasks or methods of working, reported levels of exposure were similar among sufferers of "stress" and the control population (RR 1.2, CI: 0.9 to 1.6 - Table 16d). Although this comparison is statistically non-significant, it is worth noting that the association is in the unexpected direction. In other words self-reported work-related "stress" tends to be associated with job control rather than its absence. The pattern seems to be reversed for the few (17) sample cases reporting "stress" caused by a job over 10 years ago, two thirds of whom reported that they were never able to choose or change the order of their task.

Stress, depression or anxiety

Stress, depression or anxiety was the second most commonly reported condition, 14% (171/1188) of individuals reporting a work-related illness (Table 14), affecting an estimated 279 000 (CI: 235 000 to 323 000) people. A similar number of males and females reported such a condition (Table 17), and rates were highest in the older working age group (1.2%, CI: 0.97% to 1.5%). Very few cases occurred in the retirement age groups, implying a reversible and generally non-persistent effect.

Around three quarters of cases developed their condition in the last three years (Table 12), and just over 40% of these, an estimated 92,000 (CI: 66 000 to 117 000) first become aware of their condition in the last 12 months prior to interview (Table 11), again implying a reversible effect. Raised awareness in recent years of "stress" in the workplace may also explain the high proportion of cases with recent onset. A small proportion, 8% said they had been suffering for over 10 years.

Over half of respondents reporting stress, depression or anxiety reported "workload and pace" at work as the cause or one of the work causes, in particular "pressure of work" or "too much work" (Table 18). Just over one quarter reported "lack of support", 20% "change" e.g. reorganisation at work, career change or career instability, 14% their "work schedule" e.g. long hours, shift work, limited rest breaks, 11% "contact with members of the public" e.g. conflict or poor relationships, attacked or threatened and 10% "relationships at work" e.g. attacked or threatened by colleagues. It is likely that combinations of these factors are important, and this aspect of the data will be more fully analysed in future reports.

Stress, depression or anxiety is predominantly (84%) ascribed to current or most recent jobs, and this pattern is consistent across occupations. The occupation rates can be separated into five groups (Table 19), ranging from 2.2% (CI: 1.4% to 3.0%) to zero (CI: 0% to 0.15%). The main occupations in the highest group are nurses and teachers. Managers and professional occupations fall in the second group with an overall rate of 1.1% (CI: 0.76% to 1.4%). Generally there is an inverse relationship between reported stress rates and job status, with most manual jobs falling in the lowest two groups. Coal mining, Armed Forces and security workers are exceptions to this, but are based on small numbers.

Stress ascribed Illness

A total of 158 respondents (12%) ascribed a physical condition to "stress" at work, an estimated 254 000 (CI: 213 000 to 296 000) prevalent cases (Table 14). Some 40% (63/158) described their condition as hypertension, heart disease or stroke, an estimated 102 000 (CI: 76 000 to 129 000) people and 21% (33/158) a disease of the digestive system, an estimated 52 000 (CI: 34 000 to 71 000) people. Other types of physical conditions reported included: headache and "eyestrain"; lower respiratory disease; skin disease and musculoskeletal disorders. Over 40% more males than females reported a physical condition ascribed to "stress" (Table 20). As with stress, depression or anxiety, rates were highest in the older working age group.

Of the estimated number of people with a physical condition ascribed to "stress" at work, almost one quarter first became aware of their condition in the last 12 months (Table11), and one fifth had been suffering for over 10 years (Table 12).

The reasons recorded for how work caused the condition, by definition, were related to "stress" in the workplace (Table 21), 43% mentioned "stress" (general stress), and other descriptions recorded were not dissimilar from the commonly reported causes in the stress, depression or anxiety section e.g. "workload and pace", "work schedule", "lack of support".

Physical illnesses ascribed to "stress" shows a spread of occupational rates (Table 22) from zero (CI: 0% to 0.16%) up to 1.8% (CI: 1.1% to 2.5%). Teachers again fall in the highest group (as for stress, depression or anxiety), and professional occupations again fall in the second group. Compared to the results for stress, depression or anxiety, two occupations move strongly up the ranking: road transport operatives and science and engineering; and two move strongly down: nurses and care workers.

4.2.2 Headache or "eyestrain"

Twice as many females (21) compared to males (9) reported work-related headache and "eyestrain" (Table 23), in total an estimated 50 000 (CI: 31 000 to 68 000) people. Some 70% (21/30) of cases were "eyestrain". Almost all cases were of working age (26). Just over one third of cases (11), developed the condition in the last 12 months (Table 11), an estimated 19 000 (CI: 8 000 to 31 000).

A further 17 sample cases (28 000, CI: 15 000 to 42 000) reported this condition but described it as being caused by "stress" and have been included in the 'stress ascribed illness' group (Table 10).

The majority of cases reported visual work as the cause of their condition (Table 24). In particular, nearly three quarters mentioned the use of a visual display unit. Lighting and close work were also described.

Occupations fall into two groups (Table 25). For most manual occupations, no cases were reported (there was one sample case in each of metal processing and other processing). The major occupations in the highest risk group - average prevalence rate 0.19% (CI: 0.11% to 0.26%) - are managerial and clerical.

4.2.3 Deafness, tinnitus or other ear conditions

Deafness, tinnitus or other ear conditions were commonly reported, 8% (99/1188) of those reporting a work-related illness, an estimated 170 000 (CI: 135 000 to 206 000) people. Over 80% of these cases (83/99) reported deafness, an estimated 140 000 (CI: 108 000 to 172 000) people and about one quarter (23/99) tinnitus, an estimated 41 000 (CI: 23 000 to 59 000) people (Table 10). Some individuals were suffering from both conditions, an estimated 30 000 (CI: 15 000 to 47 000), and have been included in both estimates. "Other ear" conditions included respondents reporting a perforated ear drum or excess wax.

Males reported the majority of cases (Table 26), an estimated 153 000 (CI: 119 000 to 186 000) males, compared to 18 000 (CI: 5 000 to 30 000) females. Rates were highest among males aged 65 to 74 years (2.2%, CI: 1.3% to 2.9%). Very few cases (4) developed their condition in the last 12 months (Table 11). Just over one quarter first became aware of their condition over 20 years ago and nearly two thirds over 10 years ago, reflecting the gradual causation and chronic nature of these conditions (Table 12).

Overall 87% of individuals reporting work-related deafness, tinnitus or other ear conditions said they had great difficulty hearing speech against background noise (Table 27a). When these subjects were asked about hearing speech in a quiet room (Table 27b) 40% were unable to understand what a person said if they whispered, a further 13% if they spoke normally and 6% if they spoke loudly.

Over 80% of respondents reporting tinnitus suffered severely from noises in the head (Table 28) and 43% said that the noise caused severe distress all the time.

Most cases - as expected - reported noise at work as the cause of their condition (Table 29). Just less than 80% reported working in a noisy environment as the cause, and 23% said their condition was caused by blasts or gunfire.

As well as respondents being asked how they thought work caused their condition they were also asked about exposure to certain working conditions which have been associated with their complaint. For example, prolonged or frequent exposure to machines or tools in the workplace can cause hearing damage. The risk of this occurring is related to the level of noise exposure and the length of time the individual is exposed at that level. Respondents reporting deafness, tinnitus or other ear conditions were asked whether and how often they had to raise their voice while talking to people from a normal talking distance (a marker of raised noise levels in the workplace), and whether and how often work tasks left them with ringing in their ears or a temporary feeling of deafness (a marker of exposure to intense noise). Respondents in the control population, employed in the last ten years were also asked the same questions (see section 3.6). Table 30a-b compares responses from sufferers with the responses from respondents in the control population.

Unsurprisingly, there was a very strong relationship between noise in a workplace as measured by the need to raise one's voice while talking at a normal talking distance. The relative risk at the "always or nearly always" level of this factor was estimated at 150, and two thirds of cases reported this level of exposure. The RRs decrease consistently across the lower exposure categories. The test for trend is statistically highly significant. The other risk factor examined in relation to deafness was the reported frequency of exposure to tasks which left the individual with ringing in the ears or a temporary feeling of deafness. Overall this factor also showed a significant relationship with work-related deafness, but there was no consistent change across the frequency of exposure categories. The two factors are obviously inter-dependent, and this may explain the lack of trend within levels of the second factor.

Table 31 shows the occupational breakdown for deafness, tinnitus or other ear conditions. Occupational rates for deafness, tinnitus or other ear conditions (based on cases ascribed to respondents' current or latest job) do not fully reflect the occupational risk, since so many cases only occur many years after the relevant exposure. Thus the two occupations with the second and third highest total number of cases (armed forces and coal mining) have no sample cases for which the linked job was the respondent's current or most recent job; they therefore have an occupation rate of zero. Apart from this anomaly, the main high risk group identified has a rate of 0.81% (CI: 0.42% to 1.2%), and the main occupations in this group are metal processing and other processing. The other non-zero risk group covers a rather disparate collection of occupations none of which record more than 2 sample cases ascribed to current or most recent job 70% of all estimated prevalent cases arise from the occupations in the identified high risk group plus Armed forces and coal mining.

4.2.4 Lower respiratory disease

Nearly 10% (113/1188) of individuals with a work-related illness reported a lower respiratory disease, an estimated 202 000 (CI: 163 000 to 241 000) people. An estimated 151 000 (CI: 117 000 to 185 000) were suffering from asthma symptoms (Table 32) and 83 000 (CI: 58 000 to 109 000) from chronic bronchitis symptoms (Table 32) (see section 3.1.2). Some 80 000 (CI: 55 000 to 105 000) were suffering from both types of symptoms and have been included in both estimates (Table 10).

Three times as many males as females reported a lower respiratory condition (Table 33), an estimated 154 000 (CI: 120 000 to 188 000) males and 48 000 (CI: 30 000 to 67 000) females. Rates for males increased with age. Very few cases reported first being aware of their condition in the last 12 months (Table 11), over one quarter first became aware over 20 years ago and over half over 10 years ago (Table 12).

A further 8 sample cases (12 000, CI: 4 000 to 21 000) reported a lower respiratory disease but described it as being caused by "stress" and have been included in the 'stress ascribed illness' group (Table 10).

Over two thirds of respondents reporting a work-related lower respiratory disease said their breathing was never quite right (Table 34). Breathing descriptions were most severe for respondents reporting chronic bronchitis and asthma symptoms, 92% said their breathing was never quite right, and the remainder said they regularly got trouble with their breathing, but it always got completely better. Amongst respondents reporting asthma symptoms only, 11% said they never or rarely got trouble with their breathing.

Table 35 shows at what walking pace respondents became short of breath, the table excludes individuals who reported having difficulties walking e.g. rheumatism or a heart problem. Just over half of the respondents are included in the table, and around one third of these become short of breath when walking at their own pace on level ground. This proportion was highest among respondents reporting both asthma and chronic bronchitis symptoms.

Exposure to fumes, dusts or other harmful substances are commonly linked to respiratory conditions, 89% of respondents reported such an exposure as the cause of their lower respiratory disease (Table 36). Respondents were also specifically asked whether and how often their job exposed them to breathing fumes, dusts or other harmful substances. Table 37a compares responses from sufferers with the responses from respondents in the control population. The estimated RR for ever being exposed to breathing fumes, dusts or other harmful substances was 95 (CI: 13 to 696). There was a statistically significant, but not entirely consistent, trend in RR across the exposure categories.

The chronic causation of this category of illness has the natural consequence that only half the sample cases are ascribed to the sufferer's current or most recent job (Table 38). This pattern is shown fairly consistently across individual occupations though the proportion was rather lower for construction (2/7) and metal processing (6/23), and markedly lower for coal mining where only a fifth (3/15) of the sample cases were reported by respondents whose current or most recent job was in coal mining. Occupational risks will therefore be reasonably well represented by cases arising from current or most recent jobs, though risk levels for the three occupations mentioned above will be understated in relation to other occupations.

The occupation rates fall into four groups (Table 38) with average prevalence rates ranging from zero (CI: 0% to 0.05%) to 22% (CI: 0.69% to 44%). The highest group consists of coal mining only, and is based on only three sample cases, hence the very wide confidence interval. This apparently extremely high risk is exaggerated by the rapid contraction of coal mining over the last 20 (and more) years. Apart from this anomalous group, there are two groupings of occupations showing some risk of work-related lower respiratory disease. The higher of the two has an average rate of 0.87% (CI: 0.56% to 1.2%), and is made up of road transport operatives, textile, metal and other processing operatives, farming, fishing & forestry and cleaners. The other non-zero group covers a wide range of occupations, mostly represented by one or two sample cases. The average rate for this group is 0.19% (CI: 0.11% to 0.28%).

Lower respiratory disease with asthmatic symptoms

Over three times as many males as females reported suffering from asthma symptoms, an estimated 116 000 (CI: 86 000 to 146 000) males and 35 000 (CI: 19 000 to 51 000) females (Table 39). Some 15% of sufferers reported having asthma or hay fever as a child.

A large proportion of respondents said their condition was persistent - about three quarters first became aware of their condition over 5 years ago (Table 12).

Breathing descriptions were more severe for respondents reporting chronic bronchitis symptoms as well as asthma symptoms (Table 34), so was the pace at which respondents could walk before becoming breathless (Table 35).

Smoking habits of respondents reporting asthma symptoms are shown for the main survey and control survey in Table 40. Smokers (current and ex combined) were more prominent in the control survey. In the main survey, 37% were non-smokers compared with 29% in the control population.

Some 90% of cases reported that their respiratory condition was caused by inhaling a substance (Table 41), 12% mentioned the indoor environment at work e.g. variations in temperature, passive smoking.

Lower respiratory disease with chronic bronchitis symptoms

A total of 44 respondents, an estimated 83 000 (CI: 58 000 to 109 000) people were suffering from chronic bronchitis symptoms (Table 32). Most reported cases were males (Table 42), an estimated 73 000 (CI: 49 000 to 96 000) compared to 10 000 (CI: 1 000 to 20 000) females.

Over 80% of respondents were first aware of their condition over 5 years ago, two thirds over 10 years ago and one third over 20 years ago, suggesting many chronic cases (Table 12). Chronic bronchitis cases have the longest median time since onset of all disease categories.

Over 90% of cases reported that their breathing was never quite right (Table 34), and the remainder reported that they had regular trouble with their breathing, but it always got completely better. Of the 44 sample cases reporting symptoms, 26 said they either had difficulty walking e.g. rheumatism, or heart disease, the remaining 18 cases were asked about their breathing when walking. Only 3 sample cases had no difficulties, but over half said they had to stop for breath when walking at their own pace on level ground (Table 35).

Table 43 gives smoking habits of respondents reporting chronic bronchitis symptoms in the main survey and the control population. The control population shows a stronger relationship between smokers (current and ex combined) and chronic bronchitis symptoms than in the main survey.

All but three cases reported " inhaling substances" as the cause, or one of the causes (Table 44). The other 3 cases said passive smoking, physical exertion, and variation in temperature. The types of substances individuals were exposed to were: coal dust; wood dust; cement dust; motor exhaust fumes and foundry fumes.

4.2.5 Pneumoconiosis (including asbestosis)

The 13 reported cases suggest a national prevalence of 19 000 (CI: 8 000 to 29 000). All cases but one were reported by males, and most cases were of retirement age (Table 45). This is consistent with the numbers in receipt of industrial disablement benefit for pneumoconiosis. Out of the 13 cases, 9 reported that they first became aware of their condition over 10 years ago (Table 12). One case each of fibrosing alveolitis and byssinosis were reported.

When asked to describe their breathing (Appendix 2, question 155), all cases (Table 34) said their breathing was never quite right.

All cases reported inhaling a substance at work being the cause, 5 cases reported asbestos and 5 coal dust (Table 46).

There are too few cases linked with the current or most recent job to present a formal analysis of rates by occupation.

4.2.6 Skin disease

A total of 35 respondents reported a skin disease, an estimated prevalence of 66 000 (CI: 43 000 to 88 000). Just over two thirds (24/35) of these cases were described as dermatitis or eczema, apart from one abscess, the remainder were described in more general terms such as a skin allergy, skin irritation. Only a few cases were reported in the older age-groups (Table 47). In addition to the 35 cases included in this disease group a further 13 cases, an estimated 21 000 (CI: 9 000 to 32 000) reported a skin condition caused by "stress" (Table 10).

One fifth (7/35) of the disease group were first aware of their condition in the last 12 months (Table 11), and over half in the last 3 years (Table 12). A minority of cases are nevertheless persistent: one in five cases had an onset date over 10 years ago.

The majority of cases reported handling a substance at work as the cause of their skin problem (Table 48), just over one quarter recorded cleaning materials or detergents, others reported: oils or petrol; dust or fibres; acids or alkalis and rubber, and a few cases reported the wearing of personal protective equipment. As well as handling substances respondents said that variation in temperature was the cause or one of the causes of their condition.

As well as respondents being asked how they thought work caused their condition they were also asked about exposure to certain working conditions which have been associated with their complaint. For example, handling or touching harmful substances or materials and exposure to uncomfortable heat and cold (including hot and cold weather). Respondents reporting a work-related skin disease were asked whether and how often they were exposed to such conditions. Respondents in the control population, employed in the last ten years were also asked the same questions (see section 3.6), and Table 49a-b compares responses from sufferers with the responses from respondents in the control population.

Out of 29 cases reporting a skin disease and responding to the question on handling or touching harmful substances, 21 (72%) said they had sometimes been exposed in their job, and 17 (59%) reported being exposed for at least a quarter of their working time. Comparing proportions in the main survey (job in the last 10 years) with those in the control population the relative risk for ever being exposed was 6.2 (CI: 2.6 to 14), and there was a statistically significant trend across exposure categories. The RRs were particularly high for the two highest exposure levels (about 17-fold). All cases reporting a skin disease responded to the question on exposure to uncomfortable heat or cold, 27 (77%) said that they had sometimes been exposed in their job, and 23 (66%) reported being exposed for at least one quarter of their working time. Comparing proportions in the main survey (job in the last 10 years) with those in the control population the RR for ever being exposed was 4.4 (CI: 1.9 to 10).

A breakdown of skin disease by occupation is shown in Table 50. Nearly half of the occupations reported no cases of work-related skin disease. Most reported cases were ascribed to the sufferer's current or most recent job, and rates based on these cases will fairly represent occupational risk. Occupational rates fall into three groupings, with average rates 0.41% (CI: 0.23% to 0.58%), 0.09% (CI: 0.01% to 0.17%) and zero (CI: 0% to 0.03%). The cases arise almost entirely from manual jobs. The individual occupations with the highest rates are hair and beauty, farming, fishing and forestry, repetitive assembly and inspection and construction.

4.2.7 Vibration white finger

Nineteen males reported this condition (Table 51), implying a national estimate of 36 000 (CI: 19 000 to 53 000), 8 out of the 19 cases also reported work-related deafness, tinnitus or other ear conditions. When interviewed, 17 cases reported still being affected, and 12 cases said they first became aware of their condition over 5 years ago (Table 12).

As a measure of the severity of the condition, respondents were asked if they had difficulty picking up or handling small objects between attacks of their condition, nearly two thirds (12) said they did. This implies that these cases had advanced to the stage of neurological damage.

All cases reported the use of hand held power tools as the cause (Table 52), in addition 2 cases also said that physical exertion and working outdoors were causes.

In addition, respondents were specifically asked about exposure to vibration in the workplace. Vibration exposure is generally categorised into hand-arm and whole body, although subjects can be exposed to both types. Excessive exposure to vibration through the use of hand-held tools or machinery causes hand-arm vibration syndrome, the most common effect of which is vibration white finger. Respondents reporting VWF were asked whether and how often their job involved the use of power tools which transmitted vibration into their hands. They were also asked about exposure to whole body vibration which mainly affects seated workers, where machines or vehicles transmit vibration energy into the worker's body through a seat. They were specifically asked whether and how often their job involved sitting or standing on a vibrating machine or in a vibrating vehicle. Respondents in the control population, who had worked in the last 10 years were asked the same questions on vibration.

Table 53 shows results from the main survey and control population. Out of the 19 cases reporting VWF, 16 used power tools for at least one quarter of their work time. Of those working in the last 10 years, none had never used power tools, so the baseline category for RRs is the "less than ¼ of working time" level. In comparison with this baseline, the relative risk of VWF at the "always or almost always" level is 4.2, and there is a fairly consistent, and statistically significant trend in RR between these levels. The relative risk for VWF in relation to use of a vibrating machine or vehicle was not statistically significant (RR 2.2, CI: 0.6 to 8.1).

The 19 sample cases of VWF fell in a limited number of occupations (see Table 54), and all were males. Just over half of the cases were ascribed to the sufferer's current or most recent job. In terms of rate, there are no significant differences between the occupations affected, and the average rate - calculated among males only - was 0.37% (CI: 0.14% to 0.61%). The highest number of sample cases in a single occupation (9) was in metal processing.

4.2.8 Musculoskeletal disorders

Musculoskeletal disorders were by far the most commonly reported work-related illness in this survey. A total of 679 respondents reported such a condition, giving a prevalence estimate of 1 155 000 (CI: 1 064 000 to 1 246 000) people (Table 10). Among these, an estimated 5% reported more than one musculoskeletal condition.

Musculoskeletal disorder prevalence rates per 100 ever employed were high across all age groups (Table 55), but highest in the older working age group (age 45 to retirement age), an estimated 4.8% (CI: 4.1% to 5.5%) of males and 4.3% (CI: 3.6% to 5.1%) of females.

Table 56 shows the estimated prevalence for the musculoskeletal disorder group by the part of the body affected. Of the estimated number of individuals suffering from a musculoskeletal disorder, 44% (508 000, CI: 448 000 to 569 000) suffered from a disorder which *only* affected their back, 32% (375 000, CI: 324 000 to 425 000) *only* their upper limbs or neck and 9% (100 000, CI: 74 000 to 127 000) *only* their lower limbs. Some people, 16% (187 000, CI: 151 000 to 223 000) suffered from a disorder which affected more than one part of their body or their whole body, and 3% (37 000, CI: 22 000 to 53 000) a condition which affected an internal part of their body e.g. hernia.

The estimated prevalence of work-related musculoskeletal disorders by each part of the body affected are shown in Table 57. In this table, a case *can be included in more than one category if more than one part of the body was affected by the condition.* Some 55% (372/679) of respondents reporting a musculoskeletal condition said it affected their back, an estimated 642 000 (CI: 574 000 to 710 000) people, 44% (302/679) their upper limbs or neck, an estimated 506 000 (CI: 447 000 to 565 000) people and 18% (124/679) their lower limbs, an estimated 212 000 (CI: 174 000 to 250 000) people.

Half of the respondents reporting a musculoskeletal disorder had been suffering for at least 5 years, and 16%, an estimated 180 000 (CI: 145 000 to 214 000) first became aware of their condition in the last 12 months (Tables 11 and 12).

The most commonly reported musculoskeletal disorder was back pain or strain (Table 10), 19% (126/679) of respondents (225 000, CI: 184 000 to 266 000), followed by disc problem, 15% (104/679) of respondents (177 000, CI: 141 000 to 212 000). Table 58 provides details of the reported disorder by the area of the body affected.

Poor workplace or job design can put workers' muscles and joints at risk, causing backaches, sore shoulders or elbows, or numb or tingling wrists and hands. The next part of this section concentrates on how work may have caused the reported conditions.

Respondents were asked to describe how they thought work caused or made their condition worse (Appendix 2, question 15), Table 59 summarises the responses. Just over half reported "manual handling", in particular lifting, over one quarter said "posture" e.g. bending or stooping, prolonged sitting or driving, 18% reported "repetitive work", 11% "physical work" and 10% "accidents" (mostly while manual handling).

Nearly 80% of respondents suffering from a work-related musculoskeletal disorder said a particular task or set of tasks had led to their complaint (Appendix 2, question 22). Tables 60 and 61 show responses to a range of questions about the characteristics of the task(s), by the type of musculoskeletal disorder, and by the part of the body affected respectively. Over 80% of individuals with a musculoskeletal disorder said the task(s) involved: repeating the same sequence of movements many times; working in awkward or tiring positions and leaning forward from the waist.

In addition to being asked how work caused the complaint and about characteristics of the task(s) which caused the complaint, respondents were also asked when and how often their job (as a whole) involved exposure to: repeating the same sequence of movements many times; working in awkward or tiring positions; working very fast; using appreciable force; lifting or moving heavy loads; twisting or stooping when lifting or moving heavy loads; use of power tools which transmitted vibration into their hands; sitting or standing on a vibrating machine or in a vibrating vehicle and working in uncomfortable heat or cold. The same questions were asked of respondents employed in the last 10 years, in the control population. Table 62a-i shows the results.

A high proportion of respondents said their job (or specific work task causing the complaint) involved repeating the same sequence of movements many times (Table 62a). Over half said this was always or nearly always the case, 82% said they spent at least half of their working time repeating the same sequence of movements many times. In relation to the control population the 93% of cases (working in the last 10 years) who sometimes repeat the same sequence of movements many times represented a nearly 7-fold relative risk. However, the relative risks at different exposure levels were not very different from each other, suggesting that this question is not a sensitive indicator of risk for work-related musculoskeletal cases as a whole.

Table 62b shows the proportions who reported working in awkward or tiring positions. Some 86% of sufferers (90%, job over 10 years ago and 86%, job in last 10 years) said they sometimes worked in awkward or tiring positions, 39% (51%, job over 10 years ago and 37%, job in last 10 years) said that this was always or nearly always the case. The relative risk for ever working in awkward or tiring positions was nearly seven. Again there is relatively little difference between the relative risks recorded at different levels in the risk factor, although the test for trend is positive and statistically significant ($p \sim 0.03$).

Nearly three quarters of sufferers reported sometimes working very fast, two thirds said this was the case for at least one quarter of their working time, and one third said it was always or nearly always the case (Table 62c). The overall RR for this risk factor was 1.9 (CI: 1.5 to 2.3).

The relative proportion of sufferers (ascribing their condition to a job in the last 10 years), reporting the use of appreciable force was nearly 7 times that of the control population (RR 6.7, CI: 5.4 to 8.3 - Table 62d). The trend of RR with exposure level was statistically highly significant, but much the largest increment was the step from baseline to the lowest exposure level (RR 5.3). From this level, the RR increased less than 2-fold to the highest level (RR 9.6).

Over 80% of sufferers said their job sometimes involved lifting or moving heavy loads, compared with 52% in the control population (Table 62e). This represents a 4½-fold relative risk (RR 4.2, CI: 3.4 to 5.4). The RRs increase consistently across the exposure frequency categories from 2.5 at "less than ¼ of time" up to 8.1 at "always or nearly always". The trend is statistically highly significant.

Among those who lift or move heavy loads, twisting or stooping while lifting/moving appears to be a very strong risk factor (RR 13, CI: 5.1 to 31 - Table 62f). This RR is essentially due to the relative proportion of cases who did not report twisting or stooping (1.1% work-related cases vs. 12.7% control cases). There is a gradation of risk with exposure level, especially in the two highest exposure levels (RRs 12.3 and 25.6). The trend is statistically highly significant.

Some use of power tools at work was reported by about one third of sufferers compared to one fifth in the control population (Table 62g). This represents a RR of 2 (CI: 1.6 to 2.5). The all levels trend is statistically significant, but the trend within exposed categories is not. The use of a vibrating machine or vehicle was less frequent than power tools. Some 15% of sufferers (ascribing their condition to their job in the last 10 years) and 7% of the control population reported some use of such equipment. The overall RR was 2.4 (CI: 1.8 to 3.2). Again, the all levels trend is statistically significant, but the trend within exposed categories is not.

Among the sufferers ascribing their condition to their job in the last 10 years, 61% said they were sometimes exposed to uncomfortable heat or cold, but only 42% reported sometimes being exposed in the control population (Table 62i). This represents a RR of 2.3 (CI: 1.9 to 2.9). The trend across exposure levels is statistically significant overall, but does not increase consistently with reported exposure frequency.

Table 63 shows the occupational breakdown for all musculoskeletal conditions combined. Nearly 70% of cases (490/708) are linked to the sufferer's current or most recent job, and this ratio is similar across the occupations. The occupational prevalence rates fall into five groups with average rates ranging from 0.79% (CI: 0.44% to 1.2%) up to 5.8% (CI: 4.7% to 6.8%). The lowest risk group is made up of professionals and catering workers; the highest covers coal mining, nursing, construction and other processing.

Back affected

Over half of respondents (372/679) reporting a musculoskeletal disorder said it affected their back, an estimated prevalence of 642 000 (CI: 574 000 to 710 000) people (Table 64). Some 79% (293/372) reported that their condition *only* affected their back, an estimated prevalence of 508 000 (CI: 448 000 to 569 000) people.

The average prevalence rate for males per 100 ever employed (Table 65), was nearly 60% higher than that for females (1.9%, CI: 1.6% to 2.1% and 1.2%, CI: 0.99% to 1.4% respectively). Rates were highest for both males and females in the working age groups, in particular the older working age group (age 45 to retirement age), males 2.6% (CI: 2.1% to 3.1%) and females 2.1% (CI: 1.6% to 2.6%).

The most commonly reported condition was back pain or back strain, about one third (126/372) of cases (Table 66). Disc problems was the second most commonly reported condition, 25% (96/372), and arthritic conditions affected about one fifth (75/372) respondents.

Two thirds of respondents reported "manual handling" e.g. lifting, carrying at work as the cause of their condition (Table 67), just less than one third reported "posture" e.g. bending or stooping, prolonged standing or sitting and 16% an "accident". Most of the accidents involved manual handling.

Table 68 shows the occupational breakdown for musculoskeletal conditions affecting the back. Overall, 70% of cases are linked to the sufferer's current or most recent job, and this ratio is similar across all occupations except coal mining, armed forces and literary, artistic and sport which all show lower proportions. The occupational prevalence rates fall into five groups with average rates ranging from 0.24% (CI: 0.09% to 0.39%) up to 3.4% (CI: 2.8% to 4.0%). The lowest risk group is made up of professional, secretarial, literary, artistic and sport and catering workers. The five literary, artistic and sport cases are not linked to the sufferer's current or most recent job, this suggests that individuals with work-related back problems are moving out of this occupation, with the further implication that the low rate recorded for this group will understate the risk. The main occupations in the highest risk group are coal mining, nursing, construction, electrical and other processing and care workers.

Upper limbs or neck affected

A total of 302 respondents reported a condition affecting their upper limbs or neck, an estimated 506 000 (CI: 447 000 to 565 000) people (Table 69). About three quarters (225/302) of respondents described a condition which *only* affected their upper limbs or neck, an estimated 375 000 (CI: 324 000 to 425 000) people, and just over one quarter (80/302) reported a disorder *only* affecting their neck, an estimated 132 000 (CI: 102 000 to 162 000) individuals (Table 57).

Just over 30% more females than males reported this type of condition (females 277 000, CI: 234 000 to 319 000 and males 230 000, CI: 189 000 to 270 000). For both males and females prevalence rates per 100 ever employed were highest in the older working age group, 1.9% (CI: 1.4% to 2.3%) for males and 2.7% (CI: 2.1% to 3.2%) for females (Table 70).

Table 71 shows the estimated prevalence of work-related musculoskeletal disorders affecting the upper limbs or neck by disease. The following conditions, known to affect only the upper limbs and neck, were reported: carpal tunnel syndrome; frozen shoulder; tenosynovitis; "RSI"; tennis elbow and golfer's elbow. One quarter (77/302) of respondents with an upper limb or neck disorder reported an arthritic condition, and one fifth (63/302) did not provide a medical term ("non-specific"). The majority of respondents reporting spondylosis in the survey (27/31) described their condition as affecting their neck, fewer respondents reported that the condition affected their back (9/31).

Respondents with an upper limb or neck disorder were asked whether they suffered from a range of symptoms (Appendix 2, questions 39). Table 72 shows the results by disease. The most commonly reported symptom was "aches and pains", 98% of respondents with a condition affecting their upper limbs or neck. "Limitation of movement" was reported by 86% of respondents, but all respondents with a frozen shoulder, disc problem, trapped nerve or osteo-arthritis reported suffering from this symptom. The next most commonly reported symptom was "loss of strength", 83%. This symptom was reported by over 90% of respondents reporting tenosynovitis, osteo-arthritis, carpal tunnel syndrome and frozen shoulder. "Tenderness" was reported by 83% of respondents, a high proportion of respondents who reported tennis elbow and golfer's elbow (98%), and disc problem (94%) reported this symptom. Just less than two thirds of respondents reported "numbness or tingling" (pins and needles), but for certain diseases this proportion was particularly high: carpal tunnel syndrome (95%); spondylosis (79%); osteo-arthritis (79%); spondylitis (78%) and trapped nerve (78%). Just over half of the respondents reported "swelling", this symptom was most commonly reported by sufferers of rheumatoid arthritis (74%) followed by tenosynovitis (67%) and osteo-arthritis (67%).

Table 73 shows the respondents opinion of what caused (at work) the condition which affected their upper limbs or neck. "Repetitive work" and "manual handling" were the most commonly reported causes, 38% and 37% of respondents, respectively. Nearly one quarter reported "posture", and 10% "physical work".

Table 74 shows the occupational breakdown for musculoskeletal conditions affecting the upper limbs or neck. Overall, three out of four cases are linked to the sufferer's current or most recent job, and this ratio is similar across all occupations. The occupational prevalence rates fall into three groups with average rates ranging from 0.62% (CI: 0.47% to 0.78%) up to 2.4% (CI: 1.7% to 3.1%). The main occupations in the lowest risk group are managers, science and engineering, security, and catering workers. The lowest group also covers two small occupations - coal mining and other transport and machinery operatives - in which no cases were reported, but whose small size means that the observed zero rate is not significantly different from the low rates recorded in the other jobs in this grouping. The main occupations in the highest risk group are the armed forces, construction, textile processing and other processing.

Lower limbs affected

A total of 124 respondents reported a musculoskeletal disorder which affected their lower limbs, an estimated 212 000 (CI: 174 000 to 250 000) people (Table 75). Just less than half (58/124) said their condition *only* affected their lower limbs, an estimated 100 000 (CI: 74 000 to 127 000). But over one third (45/124) said the condition also affected their back.

The average prevalence rate for males per 100 ever employed (Table 76), was nearly double that for females (0.67%, CI: 0.52% to 0.83% and 0.34%, CI: 0.24% to 0.44% respectively). Rates were highest for both males and females in the two middle age groups (age 45 to 74 years).

Over half (75/124) of the reported conditions affecting the lower limbs were described as arthritic e.g. rheumatoid arthritis, osteo-arthritis, over one quarter were non-specific (no medical term was given) e.g. ligament, cartilage or joint disorders and 12% reported sciatica or lumbago (Table 77).

The most commonly reported cause reported by the subjects, was manual handling, in particular lifting and posture (43% and 42%, of respondents respectively). Physical work was reported by over one quarter of respondents, and outdoor work by 16% (Table 78).

Table 79 shows the occupational breakdown for musculoskeletal conditions affecting the lower limbs. Overall, 60% of cases are linked to the sufferer's current or most recent job, and this ratio is fairly similar across all occupations, allowing for the fact that the numbers of cases in individual occupations are low. The occupational prevalence rates fall into five groups with average rates ranging from zero (CI: 0% to 0.05%) up to 1.2% (CI: 0.72% to 1.7%). The main occupations in the lowest risk group are science and engineering and coal mining. The main occupations in the highest risk group are electrical and textile processing, materials moving and storing, farming, fishing and forestry and construction.

4.2.9 Trauma

This group covers the long term consequences of traumatic injury other than those caused by a straightforward workplace accident (these were excluded in the review process - see section 3.2). All accidental injuries sustained within the previous 12 months were also excluded. The main kinds of injury covered are those arising from attacks, and secondary (work-related) effects of earlier injuries. This illness category covers morbidity suffered in the last year arising from incidents occurring before that period.

The 21 sample cases recorded (Table 80) suggest a national prevalence estimate of 34 000 (CI: 19 000 to 48 000). Out of the 21 sample cases, 6 were fractures and 4 were open wounds and injury to blood vessels (Table 10).

Table 81 shows the respondents opinion of how work caused their condition. Half of the respondents said their condition was caused by contact with a member of the public e.g. attack and 17% as a result of manual handling.

Table 82 shows the occupational breakdown for trauma. Nearly all cases are linked to the sufferer's current or most recent job. The occupational prevalence rates fall into three groups with average rates ranging from zero (CI: 0% to 0.02%) up to 0.49% (CI: 0.18% to 0.80%). The main occupations in the highest risk group are nursing, security, and construction. Most occupations recorded no work-related injuries of this type.

4.2.10 "Other" diseases

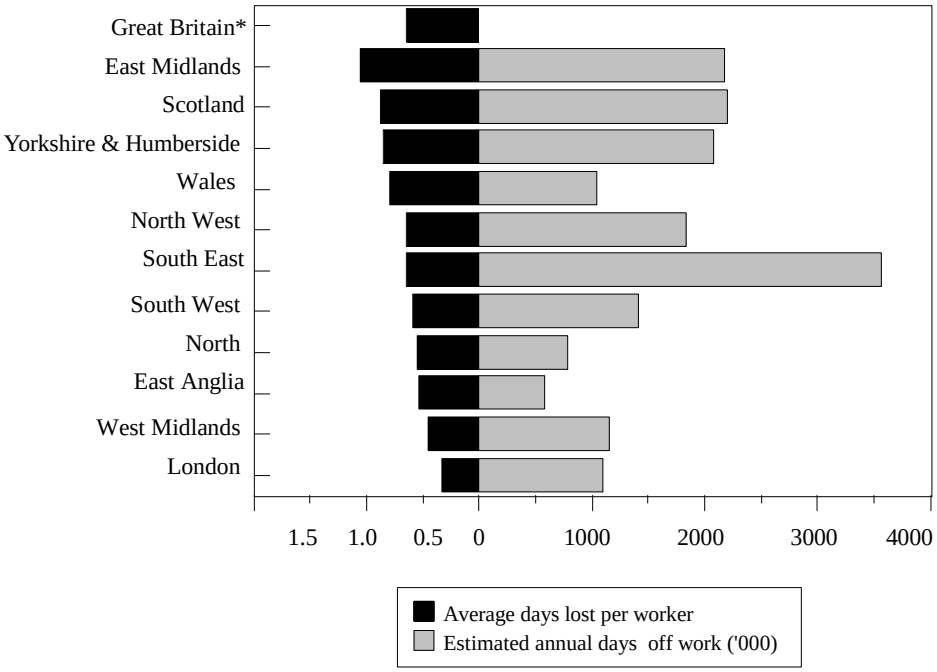
A total of 49 respondents were included in this category (Table 83). The group consists of number of diseases which have been grouped together because they include a small number of sample cases, they are not linked in any way. Table 10 includes a breakdown by disease. The largest disease reported was upper respiratory diseases (11 cases) followed by varicose veins (8 cases), and infections (5 cases).

Table 84 shows respondent's opinion of what caused their condition. The majority of respondents reporting varicose veins reported posture as the cause, in particular standing, and two thirds of respondents reporting an upper respiratory disease said the cause or one of the causes was "inhaling substances".

4.3 ECONOMIC IMPACT[Ψ]

Table 85 summarises the economic status and the amount of time taken off work due to a work-related illness. An estimated 721 000 (CI: 647 000 to 794 000) individuals did not work in the last 12 months but continued to suffer from an illness related to a previously held job. An estimated 672 000 (CI: 605 000 to 738 000) individuals suffered from some illness in the previous year but not to the extent of needing to take time off work, whereas an estimated 624 000 (CI: 560 000 to 689 000) individuals took some time off work in the previous year and an estimated 34 000 (CI: 18 000 to 49 000) took more than six months off work due to a work-related illness.

Figure 10: Estimated annual days off work due to a work-related illness and average days lost per worker, by region

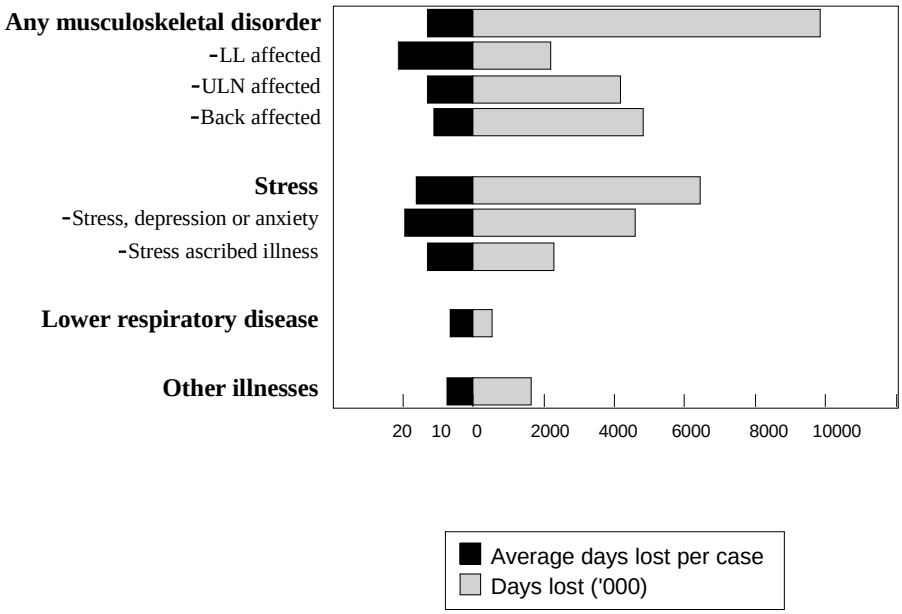


***** *The estimated annual days off work is too large (18 million) to be conveniently shown in this figure*

[Ψ] An information sheet (2/99/EMSU Economic Impact: Revised data from the self-reported work-related illness survey in 1995 (SWI95)) giving detailed information of the revised data can be obtained from HSE's website at www.hse.gov.uk/statistics/2002/ecimpact.pdf.

The regional distribution of the estimated number of days lost, along with the average number of days lost per worker are given in Table 86 and Figure 10. The table and graph include all those people who worked in the last 12 months. Days lost per worker is the number of days lost per person who has worked in the last 12 months, including people without a work-related illness. An estimated 624 000 (CI: 560 000 to 689 000) individuals took an estimated total of 18 million (CI: 14.5 million to 21.4 million) days off work. Overall, workers on average, took 0.65 (CI: 0.53 to 0.77) days off work due to a work-related illness. People in the East Midlands took more time off work per worker, 1.05 days (CI: 0.35 to 1.75), and people in three other regions took more time off work than the national average. These regions were: Scotland 0.88 days per worker (CI: 0.39 to 1.37), Yorkshire and Humberside 0.85 days per worker (CI: 0.21 to 1.49) and Wales 0.80 days per worker (CI: 0.20 to 1.40), however none of these rates are, statistically significantly higher than the rate for Great Britain. The total number of days lost was largest in the South East (excluding London) where an estimated 3.6 million days (CI: 2.1 million to 5.1 million) were lost in the last 12 months due to a work-related illness.

Figure 11: Estimated annual days off work due to a work-related illness and average days lost per case, by disease group



NB Some individuals had more than one type of illness or had a musculoskeletal disorder affecting more than one site. The days lost for these sample cases have been counted in all the relevant illness groups that resulted in the individual taking time off work.

The estimated number of days lost in the last 12 months and the average number of days lost per case (people with a work-related illness), by disease group, are shown in Table 87 and Figure 11. Individuals who took time off (the same time period) because of two different types of illnesses are counted in both illness categories. Musculoskeletal disorders were responsible for the largest number of days lost, 9.9 million (CI: 7.2 million to 12.5 million), followed by stress, 6.5 million (CI: 4.4 million to 8.5 million). On average, each individual took an estimated 13.86 days (CI: 11.40 to 16.32) off work because of their condition or conditions. Individuals suffering from a musculoskeletal disorder that affected their lower limbs, took the most number of days off work per case, taking on average 21 days per case (CI: 8.40 to 33.98). Individuals suffering from stress, depression or anxiety also took a higher than average number of days off per case but neither of these rates are, statistically, significantly higher than the overall average. The 'other illness' category includes the

following disease groups which were shown separately in the SWI 95 report: ‘deafness, tinnitus or other ear conditions’; ‘skin disease’; ‘headache or eyestrain’; ‘vibration white finger’; ‘pneumoconiosis’; ‘trauma’ and ‘other diseases’. Individuals suffering from a skin disease took a similar average number of days off per case as was reported in the 1990 SWI survey. Based on this average number of days off per case and the prevalence estimate of the number of people who worked in the last year and had suffered from a skin disease an estimated half million days were lost due to skin disease in 1995 (a more specific estimate can not be provided as the sample numbers in the 1995 survey are too small). Individuals suffering from: ‘deafness, tinnitus or other ear conditions’, ‘headache or eyestrain’ or pneumoconiosis tended to take a lower than average number of days off work per case but the sample size for each of these individual disease groups is too small to give precise estimates for the individual disease groups.

The amount of time individuals took off work by occupation is shown in Table 88. The occupation relates to the respondent's current or most recent job held in the previous 12 months and may be a different job to the one that caused their illness. The table also shows the average number of days lost due to a work-related illness, per worker and includes everybody who worked in the last 12 months, regardless of whether they had a work-related illness. On average, every worker lost an estimated 0.65 (CI: 0.53 to 0.77) of a day's work due to a work-related illness, in the 12 month period. Occupations have been ordered by the days lost rate and combined into groups so that the average rate for the groups of occupations are statistically different (see annex two for a full description of how occupations have been grouped). The occupation rates fall into six groups, with the average days lost per worker ranging from 0.05 days (CI: 0 to 0.1) to 1.87 days (CI: 1 to 2.74). Almost two thirds of the days lost were taken by workers in the first two occupation groups. The group with the highest average number of days lost per worker is made up of coal miners; nurses; security and protective services (excluding armed forces); construction and farming fishing and forestry.

Table 89 shows the number of people who were forced to change their job because of their work-related illness, by their current economic status. Half of those who were forced to change their job in the last year are now in employment compared to only 14% of those who were forced to change their job more than a year ago. Of those who left their job more than a year ago, half are now long term sick/disabled and more than a quarter have retired.

Tables 90 and 91 show the number of people who were forced to change their job in the last year by disease group and by occupation. A lot of the proportions in these two tables are based on small numbers of sample cases and should be regarded with caution when making comparisons. The diseases with the highest proportion of sample cases resulting in a forced job change were musculoskeletal disorders affecting two or more sites; lower respiratory diseases; trauma; stress, depression or anxiety and skin disease. Overall 8% of the individuals with a work-related illness who had worked in the last year have been forced to change their job. In Table 91 the percentages given are not true percentages since the occupations given in columns (a) and (b) are slightly different. In column (a) the occupation given is for the current/most recent job for all cases who worked in the last year. In column (b) the occupation is the occupation that caused the illness for all cases who had a forced job change in the last year. For most cases with a forced job change these two occupations will be the same but for some they will have moved into a different occupation since they left the job causing the complaint. Although the percentages can not be interpreted as the true percentage in the population they do indicate the occupations that had the greatest risk of resulting in a forced job change in the last year. Occupations with the highest proportion of cases forced to change their job in the last year tended to be occupations involving female workers such as ‘hair and beauty’, textile processing, nursing, care work and cleaning.

Tables 92 and 93 show the percentage of people who have ever had to change their job due to a work related illness by disease and occupation. Over a fifth of people with a work-related illness have been forced to leave the job that caused the complaint. Over two thirds of people with a musculoskeletal disorder affecting the 'back and upper limbs or neck, lower limbs or whole body' have been forced to change their job. Three disease groups that had a lower than average proportion of cases that were forced to change their job in the last year (Table 90) have a higher than average proportion of cases who have ever had to change their job. These diseases are: stress ascribed heart disease hypertension and stroke (39%); pneumoconiosis (35%) and stress ascribed other conditions (26%). This reflects the longer duration of these diseases showing that people are still suffering from these conditions even though they have changed their job.

Table 93 shows the percentage of people who have ever been forced to change their job by occupation. Manual occupations tend to have a higher proportion of people who have ever been forced to change their job with the main exception of nursing which is classed as non manual but has the highest proportion of people (40%) who have ever been forced to change their jobs. Other occupations with a high proportion of people who have left their job because of their work related illness are: security and protective services (excluding armed forces) (35%); road transport operatives (34%); care workers (33%) and cleaners (32%).

4.4 AWARENESS OF WORK-RELATED ILLNESS WITHIN THE WORKPLACE

Table 95 shows whether the people in charge knew about the illness and whether they accepted that it was work-related, by disease group (response to questions 77-79, Appendix 2). The disease groups recognised most by employers - over 70% of cases - were stress-related conditions, headache and "eyestrain" and "other" conditions. Less than half of musculoskeletal disorders affecting the lower limbs, pneumoconiosis and 'asthma and chronic bronchitis symptoms' were acknowledged.

Of the 64% of people in charge who knew about the illness, 58% accepted that the condition was work-related. Disease groups which were least accepted by employers as being work-related included 'other lower respiratory or unspecified' (11%) and musculoskeletal disorders affecting the ' upper limbs or neck and lower limbs' (13%) or 'back and upper limbs or neck and lower limbs or the whole body' (21%). Although around 70 % of "stress" conditions were known to the people in charge at work, only about half of these were accepted by employers as being work-related. Two thirds of trauma cases were accepted as being work-related.

Table 96 illustrates, by disease group, whether the individual knew that their health could be affected in this way (by their work) before developing the condition, and whether anyone else at work was affected in the same way. Overall 17% of all cases had been aware that their work might affect their health, even though almost 50% of all cases said other workers were affected in the same way. The disease groups where more than one quarter of people knew that their health might be affected by their work were: trauma (31%); musculoskeletal disorders affecting the 'back and upper limbs and neck and lower limbs or the whole body' (27%); musculoskeletal disorders affecting *only* the back (26%) and 'other lower respiratory or unspecified' (24%). Those least aware of the affect work might have were suffering from vibration white finger (9%) and musculoskeletal disorders affecting *only* their 'upper limb or neck' (10%) and *only* their 'lower limbs' (9%).

A high proportion of individuals suffering from pneumoconiosis (77%) and vibration white finger (74%) said other people at work were affected in the same way.

In many cases changes could have been made, by both the individual and the people in charge, to reduce the health risks at work. Tables 97 and 98 show what efforts the employer

made to reduce the risks. Just less than one third of respondents said changes had been made, since developing their condition, to reduce the risk of others being affected in the same way; but 41% reported that more could have been done. The disease group which received the most attention from employers was 'deafness, tinnitus or other ear conditions', 66% of all sufferers saw changes introduced by their employer, although some 49% of sufferers believed more could have been done. The majority of the remaining disease groups show less effort from the employer to reduce the risks, in particular, only around 20% of sufferers of musculoskeletal disorder affecting *only* the lower limbs, ' stress, depression or anxiety' and stress ascribed conditions said changes had been made since developing their condition. Of those suffering from stress, depression or anxiety 69% believed further changes could be made, whereas only 15% of those with a musculoskeletal disorder affecting *only* their lower limbs believed this was the case. The main change employers made was to the workplace layout, tools or equipment; followed by better individual protection, providing more information about the risks and changing the way the work was done (Table 98). Further changes that could have been made were further changes in the way the work was done and further changes to the workplace layout, tools or equipment.

Tables 99 and 100 show the changes the individual could have made to prevent the illness and to reduce the health risks. Some 38% of people felt they could have made changes to prevent their illness. More than half of respondents suffering from 'stress, depression or anxiety' (63%) and 'stress ascribed diseases of the digestive system' (55%) felt there were things they could have done to prevent their illness, whereas only a small proportion of those suffering from vibration white finger (18%) and pneumoconiosis (14%) felt they could have made changes themselves. The most popular changes the individual believed they could have made themselves were finding alternative employment, reducing the workload and changing working patterns (Table 100).

REFERENCES

1. Hodgson, JT, Jones JR, Elliott R C, Osman J. Self-reported work-related illness. HSE Research Paper 33, HSE Books 1993 ISBN 0 7176 0607 4.

2. The quarterly LFS - a new dimension to labour market statistics. Employment Gazette. October 1992:483-488

3. Medical Research Council Committee on Environmental and Occupational Health (1986). Questionnaire on respiratory symptoms (1986); with instructions to interviewers. London:MRC

4. Burney PGJ, Chinn S, Britton JR, Tattersfield AE, Papacosta AO. (1989) What symptoms predict the bronchial response to histamine? Evaluation in a community survey of bronchial symptoms questionnaire (1984) of the International Union against Tuberculosis and Lung Disease. International Journal of Epidemiology 1989, 18: 165-173.

5. Foster K, Wilmot A, Dobbs J. OPCS, General Household Survey 1988. HMSO 1990. ISBN 0 11 691326 6

6 . Davis A (1995) Hearing in adults: The prevalence and distribution of hearing impairment and reported hearing disability in the MRC Institute of Hearing Research's National Study of Hearing. MRC Institute of Hearing Research. Whurr publications ISBN 1-897635-40-0

7. Martin J, Meltzer H, Elliot D (1988), OPCS Surveys of disability in Great Britain report 1: The Prevalence of disability among adults. HMSO. ISBN 0 11 6912294

8. Goldberg D , Bridges K, Duncan-Jones P, Grayson D. Detecting anxiety and depression in general medical settings. British Medical Journal 1988; 297: 897-899.

9. SPSS for windows: CHAID, Release 6. SPSS Inc. Chicago USA 1993.

10. Kristen TS. Cardiovascular diseases and the work environment. Scan J Work Environ. Health 1989; 15: 165-179 and 245-264

11. Marmot MG, Bosma H, Hemingway H, Brunner E, Stansfeld S. Contribution of job control and other risk factors to social variations in coronary heart disease incidence. Lancet 1997; 350: 235-239

12. OPCS Standard Occupational Classification. 1990. HMSO

13. Jones JR, Hodgson JT, Osman J. Self-reported Working Conditions in 1995: Results from a household survey, HSE Books 1997 ISBN 0 7176 1449 2.

14. StatXact: statistical software for exact non-parametric inference. CYTEL Software Corporation, Cambridge, MA 02139. USA. 1992

15. Stata: Stata Statistical Software Release 5.0. Stata Corporation, College Station ,Texas. USA 1997

TABLES

Table 1: Relationship of responses to LFS screening questions and outcome of follow-up interview

Consent to follow-up and outcome	Interview type at LFS screening and screening question responses					
	1st person			Proxy		
	Yes	Not sure	No	Yes	Not sure	No
Total	1877	27	22363	560	55	9339
% giving each response	8%	-	92%	6%	1%	94%
No consent to follow-up	459	15	..	230	32	..
% of total	24%	56%		41%	58%	
Follow-up sought	1418	12	..	330	23	..
Non-contact	156	1	..	64	7	..
% of follow-up	11%	8%		19%	30%	
Changed mind^	84	4	..	46	9	..
% of follow-up	6%	33%		14%	39%	
Confirm	1178	7	..	220	7	..
% of follow-up	83%	58%		67%	30%	

* *Can be 1st person or proxy*

.. *Not applicable*

^ *No work related illness*

continued

Table 1 continued

Economically inactive age 70+*			Total		
Yes	Not sure	No	Yes	Not sure	No
274	52	5316	2711	134	37018
5%	1%	94%	7%	-	93%
63	33	..	752	80	..
23%	63%		28%	60%	
211	19	..	1959	54	..
47	3	..	267	11	..
22%	16%		14%	20%	
31	10	..	161	23	..
15%	53%		8%	43%	
133	6	..	1531	20	..
63%	32%		78%	37%	

Table 2: Number of positive responses at screening by interview type and broad illness category, and distribution of follow-up outcomes within illness category

Broad illness category reported at screening	Outcome of follow-up	Interview type at LFS screening: 1st person	Proxy	Economically inactive age 70+	Total
Musculoskeletal		1165	357	143	1665
	No consent to follow-up	24%	38%	23%	27%
	Follow-up sought	882	222	110	1214
	Non-contact	10%	20%	25%	13%
	Change mind (no WRI)	6%	12%	13%	8%
	Change mind (different WRI)	5%	2%	4%	4%
	Confirm	79%	66%	58%	75%
Respiratory		186	61	72	319
	No consent to follow-up	28%	36%	18%	27%
	Follow-up sought	134	39	59	232
	Non-contact	10%	21%	24%	16%
	Change mind (no WRI)	10%	21%	10%	12%
	Change mind (different WRI)	16%	5%	3%	11%
	Confirm	64%	54%	63%	62%
Hearing problem		100	36	55	191
	No consent to follow-up	20%	44%	22%	25%
	Follow-up sought	80	20	43	143
	Non-contact	5%	10%	21%	10%
	Change mind (no WRI)	4%	10%	9%	6%
	Change mind (different WRI)	29%	30%	16%	25%
	Confirm	63%	50%	53%	58%

Note: WRI = work-related illness

continued

Table 2 continued

Broad illness category reported at screening	Outcome of follow-up	Interview type at LFS screening: 1st person	Proxy	Economically inactive age 70+	Total
Skin problem		72	30	9	111
	No consent to follow-up	19%	20%	11%	19%
	Follow-up sought	58	24	8	90
	Non-contact	12%	25%	25%	17%
	Change mind (no WRI)	10%	13%	13%	11%
	Change mind (different WRI)	24%	13%	13%	20%
	Confirm	53%	50%	50%	52%
Stress		396	91	12	499
	No consent to follow-up	21%	45%	8%	25%
	Follow-up sought	311	50	11	372
	Non-contact	11%	22%	27%	13%
	Change mind (no WRI)	3%	12%	27%	5%
	Change mind (different WRI)	24%	22%	36%	24%
	Confirm	62%	44%	9%	58%
Other problem		281	83	38	402
	No consent to follow-up	22%	49%	26%	28%
	Follow-up sought	220	42	28	290
	Non-contact	13%	21%	18%	15%
	Change mind (no WRI)	6%	19%	32%	11%
	Change mind (different WRI)	36%	29%	25%	34%
	Confirm	44%	31%	25%	40%

Table 3: Consent, follow up and outcome of review by subjects' doctor

Disease group	Number reported	Number of illnesses doctor aware of (n)	Consent to contact doctor m (% of n)
Stress, depression or anxiety	182	160	60
Stress ascribed heart disease, hypertension or stroke	63	62	68
Stress ascribed diseases of the digestive system	34	33	61
Stress ascribed other conditions	70	66	61
Headache or "eyestrain"	31	21	57
Deafness, tinnitus or other ear conditions	108	100	69
Vibration white finger	20	15	80
Asthma symptoms only	52	52	73
Asthma & chronic bronchitis symptoms	54	53	66
Other lower respiratory disease* or unspecified	36	34	71
Pneumoconiosis	13	13	77
Skin disease	39	39	51
Back	409	387	64
Upper limbs or neck (ULN)	271	257	67
Lower limbs (LL)	122	117	71
Back & ULN	49	47	62
Back & LL	34	33	79
ULN & LL	25	24	67
Back & ULN & LL or whole body	37	37	54
Internal	24	23	78
Trauma	154	149	66
"Other" diseases	129	118	68
All illnesses	1956	1840	66

** Includes 4 cases reporting chronic bronchitis symptoms*

continued

Table 3 continued

Doctor's response	Doctor's opinion of work link				
	Missing insuff-icient info	Doctor's opinion given	Main or contri-butory cause	Sympto-matic link only	Any link unlikely
p (% of m)	q (% of p)	r	(% of r)	(% of r)	(% of r)
81	12	69	94	-	6
90	11	34	65	21	15
80	-	16	75	6	19
80	22	25	48	12	40
75	44	5	40	40	20
64	43	25	76	8	16
58	86	1	100	-	-
89	12	30	63	10	27
94	12	29	76	21	3
88	24	16	69	13	19
90	11	8	100	-	-
85	29	12	83	8	8
87	18	176	87	10	3
91	19	126	87	6	7
86	24	54	78	13	9
83	29	17	94	6	-
88	9	21	95	5	-
88	29	10	50	20	30
75	-	15	53	27	20
89	6	15	100	-	-
93	35	60	87	3	10
89	21	56	55	16	29
86	21	820	80	10	11

Table 4: Doctor and respondent's opinions of the work link

a) Respondent's opinion - Work caused the illness

Disease group	Doctor's opinion of work link			
	Doctor's opinion given	Main or contri-butory cause	Sympto-matic link only	Any link unlikely
	r	(% of r)	(% of r)	(% of r)
Stress, depression or anxiety	54	96	-	4
Stress ascribed heart disease, hypertension or stroke	18	72	11	17
Stress ascribed diseases of the digestive system	9	78	-	22
Stress ascribed other conditions	13	38	8	54
Headache or "eyestrain"	2	50	50	-
Deafness, tinnitus or other ear conditions	22	82	5	14
Vibration white finger	1	100	-	-
Asthma symptoms only	18	67	11	22
Asthma & chronic bronchitis symptoms	17	82	18	-
Other lower respiratory disease* or unspecified	12	58	17	25
Pneumoconiosis	8	100	-	-
Skin disease	9	89	-	11
Back	114	89	5	5
Upper limbs or neck (ULN)	98	92	4	4
Lower limbs (LL)	30	87	7	7
Back & ULN	9	100	-	-
Back & LL	13	100	-	-
ULN & LL	7	57	29	14
Back & ULN & LL or whole body	4	50	25	25
Internal	11	100	-	-
Trauma	54	91	-	9
"Other" diseases	26	65	8	27
All illnesses	549	85	5	9

Note: For 7 illnesses respondents did not say whether the illness was caused or made worse by work

continued

* *Includes 1 case reporting chronic bronchitis symptoms*

Table 4 continued

b) Respondent's opinion - Work made the illness worse

Disease group	Doctor's opinion of work link			
	Doctor's opinion given	Main or contri-butory cause	Sympto-matic link only	Any link unlikely
	r	(% of r)	(% of r)	(% of r)
Stress, depression or anxiety	15	87	0	13
Stress ascribed heart disease, hypertension or stroke	16	56	31	13
Stress ascribed diseases of the digestive system	7	71	14	14
Stress ascribed other conditions	12	58	17	25
Headache or "eyestrain"	3	33	33	33
Deafness, tinnitus or other ear conditions	3	33	33	33
Vibration white finger	-	-	-	-
Asthma symptoms only	10	60	10	30
Asthma & chronic bronchitis symptoms	11	64	27	9
Other lower respiratory disease or unspecified	3	100	-	-
Pneumoconiosis	-	-	-	-
Skin disease	3	67	33	-
Back	61	82	18	-
Upper limbs or neck (ULN)	27	67	15	19
Lower limbs (LL)	24	67	21	13
Back & ULN	8	88	13	-
Back & LL	8	88	13	-
ULN & LL	3	33	-	67
Back & ULN & LL or whole body	11	55	27	18
Internal	4	100	-	-
Trauma	6	50	33	17
"Other" diseases	29	48	21	31
Total cases	264	68	18	14

Table 5: Outcome of HSE panel case review by disease group

Disease group	Sample cases	Main cause	Contri-butory cause
		%	%
Stress, depression or anxiety	182	70	24
Stress ascribed heart disease, hypertension or stroke	63	-	-
Stress ascribed diseases of the digestive system	34	-	-
Stress ascribed other conditions	70	-	-
Headache or "eyestrain"	31	58	32
Deafness, tinnitus or other ear conditions	108	87	5
Vibration white finger	20	85	10
Asthma symptoms only	52	42	35
Asthma & chronic bronchitis symptoms	54	50	28
Other lower respiratory disease* or unspecified	36	53	33
Pneumoconiosis	13	100	-
Skin disease	39	62	28
Back	410	45	26
Upper limbs or neck (ULN)	270	62	24
Lower limbs (LL)	122	23	25
Back & ULN	49	37	41
Back & LL	34	41	29
ULN & LL	25	48	36
Back & ULN & LL or whole body	37	24	49
Internal	24	67	29
Trauma	154	11	4
"Other" diseases	129	24	16
All illnesses	1956	44	21

+Includes cases where work has revealed problem

continued

**Includes 4 cases reporting chronic bronchitis symptoms*

Table 5 continued

Review category				
Physical illness or symptoms ascribed to stress	Sympto-matic link only+	Not a work-related condition	All accidents in the last 12 mths	Non-manual handling accidents > 12 mths ago
%	%	%	%	%
..	..	5	..	1
100	..	..	..	..
97	..	3	..	..
100	..	..	..	..
..	7	..	..	3
..	2	7	..	..
..	5	..	..	..
..	14	10	..	..
..	19	2	2	..
..	6	8	..	..
..	..	..	..	..
..	8	..	..	3
..	11	0	8	10
..	3	1	3	9
..	21	3	9	21
..	6	2	2	12
..	21	..	3	6
..	8	..	..	8
..	11	3	..	14
..	..	..	..	4
..	3	3	32	48
..	41	11	3	5
9	9	3	5	10

Table 6: Outcome of HSE panel case review by disease

Disease group Disease	Total	Main cause	Contri-butory cause
Stress, depression or anxiety	182	127	44
Stress ascribed heart disease, hypertension or stroke	63	-	-
Stress ascribed diseases of digestive system	34	-	-
Stress ascribed other conditions	70	-	-
Stress ascribed headache or "eyestrain"	17	-	-
Stress ascribed lower respiratory disease	8	-	-
Stress ascribed musculoskeletal disorders	13	-	-
Stress ascribed skin disease	10	-	-
Stress ascribed other	22	-	-
Headache or "eyestrain"	31	18	10
Migraine or headache	10	5	2
"Eyestrain"	21	13	8
Deafness, tinnitus or other ear conditions	108	94	5
Deafness	69	64	2
Tinnitus	7	5	1
Deafness & tinnitus	17	17	-
Other ear condition	15	8	2
Vibration white finger	20	17	2
Asthma symptoms only	52	22	18
Asthma & chronic bronchitis symptoms	54	27	15
Other lower respiratory disease* or unspecified	36	19	12
Pneumoconiosis	13	13	-
Pneumoconiosis	8	8	-
Asbestosis	5	5	-
Skin disease	39	24	11
Dermatitis or eczema	27	18	6
Other skin disease	12	6	5
Musculoskeletal disorders	971	449	267
Carpal tunnel syndrome	18	17	1
Frozen shoulder	9	3	4
Tenosynovitis	17	15	1
"RSI"	26	23	3
Tennis elbow or golfer's elbow	38	30	6
Disc problem	131	72	33
Trapped nerve	24	9	7

+ Includes cases where work has revealed problem.

continued

** Includes 4 cases reporting chronic bronchitis symptoms.*

Table 6 continued

[Sample cases]

Review category				
Illness or symptom ascribed to stress	Sympto-matic link only+	Not a work-related condition	Accidents in the last 12 mths	Non-manual handling accidents > 12 mths ago
-	-	9	-	2
63	-	-	-	-
33	-	1	-	-
70	-	-	-	-
17	-	-	-	-
8	-	-	-	-
13	-	-	-	-
10	-	-	-	-
22	-	-	-	-
-	2	-	-	1
-	2	-	-	1
-	-	-	-	-
-	2	7	-	-
-	-	3	-	-
-	-	1	-	-
-	-	-	-	-
-	2	3	-	-
-	1	-	-	-
-	7	5	-	-
-	10	1	1	-
-	2	3	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	3	-	-	1
-	2	-	-	1
-	1	-	-	-
-	93	8	51	103
-	-	-	-	-
-	-	-	1	1
-	-	-	-	1
-	-	-	-	-
-	1	-	1	-
-	9	-	2	15
-	2	-	4	2

continued overleaf

Table 6: Outcome of HSE panel case review by disease (continued)

Disease group Disease	Total	Main cause	Contri-butory cause
Rheumatoid arthritis	19	1	15
Arthritis	129	44	42
Osteo-arthritis	69	31	22
Sciatica or lumbago	46	15	18
Spondylosis	42	20	11
Spondylitis	30	11	12
Hernia of abdominal cavity	19	13	6
Non specific			
- Back pain or strain	193	83	43
- Muscle or tendon disorders	39	23	7
- Ligament, cartilage or joint disorders	81	26	20
- Other disorders	41	13	16
Trauma	154	17	6
Fracture	58	4	2
Open wounds or injury to blood vessels	33	3	1
Dislocations, sprains or strains	17	-	2
Other trauma	46	10	1
"Other" diseases	129	31	20
Heart disease hypertension or stroke	18		2
Varicose veins	10	4	4
Other circulatory system disease	7	1	3
Digestive system disease	9	1	-
Upper respiratory disease	19	11	3
Nervous system disease	6	-	-
Endocrine or metabolic disease	6	1	2
Infections	12	6	-
Eye conditions	25	2	2
"Other" disease	17	5	4
All reported illnesses	1956	858	410

+ Includes cases where work has revealed problem

continued

Table 6 continued

[Sample cases]

Review category				
Illness or symptom ascribed to stress	Sympto-matic link only+	Not a work-related condition	Accidents in the last 12 mths	Non-manual handling accidents > 12 mths ago
-	2	-	-	1
-	22	1	-	20
-	7	1	1	7
-	9	-	-	4
-	1	-	1	9
-	1	2	1	3
-	-	-	-	-
-	26	-	24	17
-	-	1	5	3
-	7	1	11	16
-	6	2	-	4
-	4	4	49	74
-	2	-	19	31
-	-	3	11	15
-	1	-	5	9
-	1	1	14	19
-	53	14	4	7
	12	2	1	1
-	1	-	1	-
-	2	-	-	1
-	7	1	-	-
-	4	1	-	-
-	1	3	-	2
-	2	-	-	1
-	2	3	1	-
-	16	2	1	2
-	6	2	-	-
166	177	52	105	188

Table 7: Prevalence estimates by main disease group and HSE review categories

Disease group	Main or contributory cause	Physical illness or symptoms ascribed to stress
Stress, depression or anxiety	279	-
Stress ascribed heart disease, hypertension or stroke	-	102
Stress ascribed diseases of the digestive system	-	52
Stress ascribed other conditions	-	113
Headache or "eyestrain"	46	-
Deafness, tinnitus or other ear conditions	170	-
Vibration white finger	36	-
Asthma symptoms only	72	-
Asthma & chronic bronchitis symptoms	79	-
Other lower respiratory disease* or unspecified	51	-
Pneumoconiosis	19	-
Skin disease	66	-
Back	510	-
Upper limbs or neck (ULN)	385	-
Lower limbs (LL)	100	-
Back & ULN	66	-
Back & LL	41	-
ULN & LL	37	-
Back & ULN & LL or whole body	43	-
Internal	37	-
Trauma	37	-
"Other" diseases	85	-
Total cases	2160	268

+ Includes cases where work has revealed problem

** Includes 4 cases reporting chronic bronchitis symptoms*

 # Sub groups may not add to total due to rounding

continued

Table 7 continued

[Thousands]

Review category					Total#
Sub-total excluding symptomatic and non work-related causes	Symptomatic link only+	Not a work-related condition	All accidents in the last 12 months	Non-manual handling accidents> 12 mths ago	
279	-	16	-	3	298
102	-	-	-	-	102
52	-	1	-	-	54
113	-	-	-	-	113
46	4	-	-	2	51
170	2	11	-	-	183
36	1	-	-	-	37
72	15	8	-	-	95
79	17	2	2	-	100
51	4	6	-	-	61
19	-	-	-	-	19
66	8	-	-	2	75
510	68	2	54	65	699
385	11	3	11	41	450
100	46	5	21	45	217
66	4	2	2	10	84
41	11	►	1	3	57
37	3	►	►	4	44
43	9	2	►	9	63
37	►	►	►	1	38
37	6	6	92	131	272
85	94	25	10	14	227
2427	301	89	193	329	3338

Table 8: Estimated prevalence of work-related illness and rates per 100 ever employed, by age and sex

Sex Age group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Males							
16-44	250	461	402	521	4.3	3.8	4.8
45-64	309	535	474	596	8.5	7.5	9.4
65-74	91	146	114	178	6.5	5.1	7.9
75+	40	60	40	81	4.7	3.1	6.2
All males	690	1202	1110	1295	5.8	5.4	6.3
Females							
16-44	215	343	296	391	3.3	2.9	3.8
45-59	211	340	293	387	6.8	5.9	7.7
60-74	58	103	76	130	2.6	1.9	3.3
75+	14	*28*	*13*	*42*	*1.3*	*0.6*	*1.9*
All females	498	814	741	887	3.8	3.4	4.1
All persons	1188	2017	1897	2136	4.8	4.5	5.1

Note: Figures in italics are estimates based on 30 or fewer sample cases

Table 9: Estimated prevalence of work-related illness and rates per 100 ever employed, by region

Region	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
North	96	153	119	188	6.6	5.2	8.0
Yorkshire and Humberside	115	189	153	226	5.0	4.1	6.0
North West	142	239	198	280	5.1	4.3	6.0
West Midlands	99	171	135	206	4.3	3.5	5.2
East Midlands	104	178	140	215	5.8	4.6	6.9
South West	102	168	134	202	4.5	3.7	5.4
East Anglia	49	80	56	104	4.9	3.5	6.4
South East (excluding London)	231	393	340	446	4.8	4.2	5.4
London	91	173	135	211	3.5	2.8	4.3
Wales	56	100	71	128	4.7	3.4	6.0
Scotland	103	174	138	210	4.5	3.6	5.4
Great Britain (All persons)	1188	2017	1897	2136	4.8	4.5	5.1

Table 10: Estimated prevalence of work-related illness, by detailed disease categories

Disease Group Disease	Sample cases	Prevalence estimates (thousands)		
		central	95% C.I. lower	upper
Stress, depression or anxiety	171	279	235	323
Stress ascribed heart disease, hypertension or stroke	63	102	76	129
Stress ascribed diseases of digestive system	33	52	34	71
Stress ascribed other conditions	69 (1)	111 (2)	84	138
Stress ascribed headache or "eyestrain"	17	*28*	*15*	*42*
Stress ascribed skin disease	13	*21*	*9*	*32*
Stress ascribed musculoskeletal disorders	10	*16*	*6*	*27*
Stress ascribed lower respiratory disease	8	*12*	*4*	*21*
Stress ascribed other	22	*35*	*20*	*50*
Headache or "eyestrain"	30	50	31	68
Migraine or headache	9	*15*	*5*	*25*
"Eyestrain"	21	*35*	*20*	*50*
Deafness, tinnitus or other ear conditions	99	170	135	206
Deafness	66	109	82	136
Tinnitus	6	*10*	*2*	*18*
Deafness & tinnitus	17	*31*	*15*	*47*
Other ear condition	10	*20*	*6*	*35*
Vibration white finger	19	*36*	*19*	*53*
Asthma symptoms only	40	72	49	94
Asthma & chronic bronchitis symptoms	42	80	55	105

continued

Table 10 continued

Disease Group Disease	Sample cases	Prevalence estimates (thousands)		
			95% C.I.	
		central	lower	upper
Other lower respiratory disease* or unspecified	31	51	32	70
Pneumoconiosis	13	*19*	*8*	*29*
Pneumoconiosis	8	*12*	*4*	*21*
Asbestosis	5	*7*	*1*	*13*
Skin disease	35	66	43	88
Dermatitis or eczema	24	*46*	*27*	*65*
Other skin disease	11	*19*	*8*	*31*
Musculoskeletal disorders	679 (35)	1155 (65)	1064	1246
Carpal tunnel syndrome	18	*29*	*15*	*43*
Frozen shoulder	7	*14*	*3*	*24*
Tenosynovitis	16	*28*	*14*	*43*
"RSI"	26	*41*	*25*	*57*
Tennis elbow or golfer's elbow	36	62	40	83
Disc problem	104 (1)	177 (1)	141	212
Trapped nerve	16	*26*	*13*	*39*
Rheumatoid arthritis	16	*27*	*14*	*41*
Arthritis	86	142	111	173
Osteo-arthritis	53	88	63	112
Sciatica or lumbago	33	58	38	79
Spondylosis	31	49	31	66
Spondylitis	23	*39*	*23*	*56*
Hernia of abdominal cavity	19	*30*	*16*	*45*

continued overleaf

Table 10: Estimated prevalence of work-related illness, by detailed disease categories (continued)

Disease Group Disease	Sample cases	Prevalence estimates (thousands)		
		central	95% C.I. lower	upper
Non-specific				
-Back pain or strain	126	225	184	266
-Muscle or tendon disorders	30	49	31	67
-Ligament, cartilage or joint disorders	46	83	58	108
-Other disorders	28 *(1)*	*48 (3)*	*30*	*66*
Trauma	21 *(2)*	*34 (3)*	*19*	*48*
Fracture	6	*9*	*2*	*17*
Open wounds or injury to blood vessels	4	*6*	*0*	*13*
Dislocations, sprains or strains	2	*3*	*0*	*7*
Other trauma	11	*18*	*7*	*29*
"Other" diseases	49	82	58	105
Heart disease hypertension or stroke	2	*3*	*0*	*7*
Varicose veins	8	*14*	*4*	*23*
Other circulatory system disease	4	*7*	*0*	*14*
Digestive system disease	3	5	*0*	*10*
Upper respiratory disease	11	18	*7*	*29*
Endocrine or metabolic disease	3	*6*	*0*	*12*
Infections	5	9	*1*	*17*
Eye conditions	4	*7*	*0*	*15*
"Other" disease	9	*13*	*4*	*22*
All persons	1188	2017	1897	2136

Note: Figures in italics are estimates based on 30 or fewer sample cases.

Figures in brackets show the number of people who reported more than one illness of the same type.

* *Includes two cases reporting chronic bronchitis symptoms*

Table 11: Estimated incidence of work-related illness by disease group

Disease group	Sample cases	Incidence+ estimates (thousands)		
			95% C.I.	
		central	lower	upper
Stress, depression or anxiety	56	92	66	117
Stress ascribed heart disease, hypertension or stroke	14	*21*	*10*	*32*
Stress ascribed diseases of the digestive system	8	*13*	*3*	*23*
Stress ascribed other conditions	17 (1)	*27 (2)*	*14*	*39*
Headache or "eyestrain"	11	*19*	*8*	*31*
Deafness, tinnitus or other ear conditions	4	*6*	*0*	*11*
Vibration white finger	-	-	*0*	*0*
Asthma symptoms only	5	*8*	*1*	*15*
Asthma & chronic bronchitis symptoms	1	*2*	*0*	*7*
Other lower respiratory disease* or unspecified	7	*12*	*3*	*22*
Pneumoconiosis	-	-	*0*	*0*
Skin disease	7	*12*	*3*	*22*
Back	38	64	43	84
Upper limbs or neck (ULN)	53	89	64	114
Lower limbs (LL)	6	*11*	*2*	*20*
Back & ULN	-	-	*0*	*0*
Back & LL	3	*6*	*0*	*12*
ULN & LL	1	*1*	*0*	*4*
Back & ULN & LL or whole body	1	*1*	*0*	*4*
Internal	7	*11*	*3*	*20*
Trauma	6 (2)	*10 (3)*	*2*	*18*
"Other" diseases	7	*13*	*3*	*23*
All persons	240	399	346	451

continued

Table 11 continued

Disease group	Sample cases	Incidence+ estimates (thousands)		
			95% C.I.	
		central	lower	upper
Combinations of lower respiratory categories				
Any lower respiratory	13	*23*	*10*	*35*
Chronic bronchitis symptoms	1	*2*	*0*	*7*
Asthma symptoms	6	*10*	*2*	*19*
Combinations of musculoskeletal conditions				
Any musculoskeletal disorders	107 (2)	180 (4)	145	214
Back affected	42	70	49	92
LL affected	11	*19*	*8*	*31*
ULN affected	55	91	66	116

Note: Figures in italics are estimates based on 30 or fewer sample cases

* *Includes cases with chronic bronchitis symptoms*

+ *New cases in the last 12 months*

Table 12: Work-related illness cases by disease group and percentage + distribution of cases by duration of disease

	Sample cases	0	1
Individual disease groups (mutually exclusive)			
Stress, depression or anxiety	169	33	19
Stress ascribed heart disease, hypertension or stroke	62	21	11
Stress ascribed diseases of the digestive system	33	*25*	*24*
Stress ascribed other conditions	69	26	18
Headache or "eyestrain"	30	*39*	*7*
Deafness, tinnitus or other ear conditions	94	4	3
Vibration white finger	18	-	*12*
Asthma symptoms only	40	11	2
Asthma & chronic bronchitis symptoms	42	3	-
Other lower respiratory disease* or unspecified	31	24	3
Pneumoconiosis	13	-	*6*
Skin disease	34	19	29
Back	292	13	10
Upper limbs or neck (ULN)	227	23	14
Lower limbs (LL)	58	11	15
Back & ULN	38	-	10
Back & LL	24	*13*	*18*
ULN & LL	21	*4*	*5*
Back & ULN & LL or whole body	27	*3*	-
Internal	23	*30*	*25*
Trauma	23	*36*	*11*
"Other" diseases	49	16	15
All Illnesses	1417	18	12
Combinations of lower respiratory categories			
Any lower respiratory disease	113	11	2
Asthma symptoms	82	7	1
Chronic bronchitis symptoms	44	3	-
Combinations of musculoskeletal conditions			
Any Musculoskeletal disorders	710	15	12
ULN affected	307	18	12
Back affected	375	11	10
LL affected	124	9	11

Note: Figures in italics are estimates based on 30 or fewer sample cases

continued

* *Includes chronic bronchitis symptoms*

\+ *Percentages based on weighted data*

Table 12 continued

Duration of illness (years)						
2	3	4 - 5	6 - 10	11-15	16 - 20	20+
13	11	5	12	4	2	2
9	3	10	26	7	7	6
15	*13*	*5*	*9*	-	*7*	*3*
14	1	10	8	6	6	12
13	-	*13*	*9*	*4*	*12*	*4*
2	1	9	19	19	16	28
-	*12*	*12*	*25*	*20*	-	*20*
2	3	12	24	12	5	28
4	3	7	16	6	26	37
16	3	8	3	17	12	14
7	*7*	-	*7*	*34*	*8*	*33*
-	7	6	17	9	3	9
9	5	9	17	12	10	15
8	7	11	19	7	5	6
4	7	6	16	13	7	21
3	15	8	27	13	10	14
-	-	*12*	*12*	*16*	*12*	*16*
5	*10*	*4*	*28*	*14*	*15*	*16*
3	*14*	*12*	*11*	*7*	*19*	*31*
3	-	-	*13*	*18*	*6*	*6*
16	*10*	*10*	-	-	*9*	*9*
10	2	6	14	6	15	17
8	6	9	16	10	9	13
6	3	9	16	11	15	28
3	3	9	20	9	16	33
6	3	6	15	7	25	35
7	6	9	18	11	9	13
7	9	10	20	9	7	9
8	6	9	18	12	10	16
3	8	8	17	13	10	21

Table 13: Sample numbers, rates (%) and prevalence by occupation for subjects reporting a work-related illness

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Coal mining	5	*39*	*14*	*63*	32	55	35	75
Nursing	44				62	104	77	130
Other processing	65				91	169	133	205
Construction	47	7.5	6.5	8.5	67	123	93	153
Teaching	52				59	95	70	120
Miscellaneous	6				9	*16*	*5*	*27*
Farming,fishing & forestry	24				34	57	37	77
Road transport operatives	30				38	71	48	93
Armed Forces	5				26	*45*	*26*	*65*
Care workers	43				54	91	67	116
Material moving and storing	19				28	*47*	*29*	*65*
Electrical processing	18	5.0	4.4	5.6	27	*47*	*28*	*66*
Metal processing	47				99	170	135	205
Textile processing	14				25	*42*	*25*	*58*
Security (excl. Armed Forces)	17				21	*32*	*17*	*46*
Hair & beauty	5				7	*14*	*4*	*25*
Repetitive assembly, inspection	21				30	*57*	*36*	*78*
Other education & welfare	27				30	*47*	*29*	*65*
Other transport and machinery operatives	7				13	*22*	*10*	*34*

continued

Table 13 continued

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Managerial	68				86	143	111	174
Literary, artistic & sport	10				17	*31*	*16*	*46*
Science & engineering	30				37	61	41	81
Clerical	72				93	147	116	178
Professional	49	3.0	2.7	3.3	58	88	65	112
Cleaner	26				37	63	42	84
Secretarial	27				39	63	42	83
Selling	39				47	76	53	98
Other personal services	4				6	*10*	*2*	*18*
Catering	14	*1.6*	*0.8*	*2.5*	21	*38*	*21*	*55*

Note: Figures in italics are estimates based on 30 or fewer sample cases

* *Rate given for groupings of occupations chosen so that the group rates are significantly different*

Table 14: Estimated prevalence of work-related stress, depression or anxiety or a stress ascribed illness

Disease group	Sample cases	Prevalence estimates (thousands)		
			95% C.I.	
		central	lower	upper
Stress, depression or anxiety	171	279	235	323
Stress ascribed illness	158 (8)	254 (13)	213	296
Stress ascribed heart disease, hypertension or stroke	63	102	76	129
Stress ascribed diseases of digestive system	33	52	34	71
Stress ascribed headache or "eyestrain"	17	*28*	*15*	*42*
Stress ascribed skin disease	13	*21*	*9*	*32*
Stress ascribed musculoskeletal disorders	10	*16*	*6*	*27*
Stress ascribed lower respiratory disease	8	*12*	*4*	*21*
Stress ascribed other	22	*35*	*20*	*50*
All persons with "stress"	316 (20)	515 (31)	456	574

Note: Figures in italics are estimates based on 30 or fewer sample cases.

Figures in brackets show the number of people who reported more than one illness of the same type

Table 15a: Frequency distribution of anxiety scores, and average anxiety score

Score	Percentage			
	Stress, depression or anxiety*	Stress ascribed illness*	"Stress"+	Control population*
0	3.4	6.8	4.3	46.0
1	5.4	6.7	6.8	18.7
2	1.4	0.6	1.1	3.6
3	2.4	2.8	2.7	4.7
4	5.7	4.5	5.8	5.9
5	9.9	16.5	13.2	7.8
6	16.5	19.3	17.0	5.2
7	18.5	17.2	18.4	4.4
8	22.9	14.4	19.4	2.4
9	13.9	11.3	11.7	1.2
Average Score	6.2	5.7	6.0	2.0

** Adjusted to match profile of sufferers of work-related "stress" by age and sex*

+ Subjects reporting stress, depression or anxiety or a stress ascribed illness

Table 15b: Frequency distribution of depression scores, and average depression score

Score	Percentage			
	Stress, depression or anxiety*	Stress ascribed illness*	"Stress"+	Control population*
0	13.8	19.4	16.6	62.8
1	0.7	2.2	1.3	7.0
2	2.9	8.2	5.7	9.0
3	8.5	7.2	7.7	6.3
4	10.8	14.0	13.8	4.8
5	13.0	16.3	13.4	3.4
6	11.6	12.3	12.6	3.1
7	16.2	8.4	11.8	2.4
8	16.7	10.4	12.7	0.8
9	6.0	1.6	4.3	0.3
Average Score	5.1	4.1	4.6	1.3

** Adjusted to match profile of sufferers of work-related "stress" by age and sex*

+ Subjects reporting stress, depression or anxiety or a stress ascribed illness

Table 16: Percentage of respondent's with work-related stress, depression or anxiety or a stress ascribed condition reporting exposure to selected working conditions compared to the percentage exposed in the general working population

a) Too much work

Too much work	Work-related "stress" cases ascribed to		Control population*+	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job ≤ 10 years ago	
Sample cases	*17*	298	1513	
Ever (%)	*94*	87	61	4.5 (3.1 , 6.5)
Time exposed (%)				
Always/nearly always	*71*	55	19	8.9
About ¾ of the time	*6*	10	12	2.9
About ½ of the time	*12*	14	14	2.8
About ¼ of the time	*0*	6	11	1.7
Less than ¼ of the time	*6*	2	6	1.0
Non-response	*0*	0	0	-
Never	*6*	13	38	1.0
Trend test p value				p<0.001

Note: Figures in italics are estimates based on 30 or fewer sample cases
** Adjusted to match case profile by age, sex and when employed.*
+ Based on results from the ONS Omnibus Survey, October 1995.

b) Too little work

Too little work	Work-related "stress" cases ascribed to		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job ≤ 10 years ago	
Sample cases	*17*	298	3021	
Ever (%)	*6*	16	23	0.7 (0.5 , 0.9)
Time exposed (%)				
Always/nearly always	*0*	2	2	0.9
About ¾ of the time	*0*	1	1	0.5
About ½ of the time	*0*	3	5	0.5
About ¼ of the time	*6*	5	7	0.7
Less than ¼ of the time	*0*	6	9	0.7
Non-response	*0*	0	0	-
Never	*94*	84	77	1.0
Trend test p value				p~0.03#

Note: Figures in italics are estimates based on 30 or fewer sample cases
** Adjusted to match case profile by age, sex and when employed.*
 # Trend excluding baseline category: p>0.5

continued

Table 16 continued

c) Tight deadlines

Tight deadlines	Work-related "stress" cases ascribed to		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job ≤ 10 years ago	
Sample cases	*17*	298	3020	
Ever (%)	*94*	90	67	4.7 (3.1 , 6.9)
Time exposed (%)				
Always/nearly always	*65*	50	29	5.9
About ¾ of the time	*0*	12	9	4.8
About ½ of the time	*24*	11	14	2.9
About ¼ of the time	*0*	12	10	4.4
Less than ¼ of the time	*6*	5	5	3.3
Non-response	*0*	0	0	-
Never	*6*	10	33	1.0
Trend test p value				p<0.001

Note: Figures in italics are estimates based on 30 or fewer sample cases
** Adjusted to match case profile by age, sex and when employed.*

d) Choose or change order of task or method of working

Choose or change order of task or method of working	Work-related "stress" cases ascribed to		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job ≤ 10 years ago	
Sample cases	*17*	295	3020	
Ever (%)	*35*	63	57	1.2 (0.9 , 1.6)
Time exposed (%)				
Always/nearly always	*18*	35	29	1.3
About ¾ of the time	*6*	6	7	0.9
About ½ of the time	*6*	10	12	0.9
About ¼ of the time	*6*	4	6	0.8
Less than ¼ of the time	*0*	8	3	3.3
Non-response	*0*	0	2	-
Never	*65*	37	41	1.0
Trend test p value				p~0.4

Note: Figures in italics are estimates based on 30 or fewer sample cases
** Adjusted to match case profile by age, sex and when employed.*

continued overleaf

Table 16 continued

e) Enough help and support from people in charge when needed

Enough help and support from people in charge when needed	Work-related "stress" cases ascribed to		Control population*	Relative risk(RR) (no trend test)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	*18*	298	3026	
Time exposed (%)				
Enough help and support	*33*	31	74	1.0
Not enough help and support	*39*	58	23	6.4 (4.9 , 8.4)
Non-response	*28*	11	3	9.2 (5.7 , 15)

Note: Figures in italics are estimates based on 30 or fewer sample cases

** Adjusted to match case profile by age, sex and when employed.*

f) Physically attacked by a member of the public

Physically attacked by a member of the public	Work-related "stress" cases ascribed to		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	*17*	295	3020	
Ever attacked (%)	*12*	18	8	2.5 (1.8 , 3.6)
Number of attacks (%)				
0	*0*	0	2	0.2
1	*6*	5	3	2.1
2	*0*	4	1	3.8
3	*6*	1	0	1.9
4	*0*	2	0	15.5
5-9	*0*	1	1	2.7
10+	*0*	3	1	5.8
Non response	*0*	0	0	-
Never	*88*	82	92	1.0
Trend test p value				p=0.001

Note: Figures in italics are estimates based on 30 or fewer sample cases
For cases who are currently working the number of attacks is in the last year, but for cases who are not working the number of attacks is based on a typical year.

** Adjusted to match case profile by age, sex and when employed.*

continued

Table 16 continued

g) Threatened with physical violence by a member of the public

Threatened with physical violence by a member of the public	Work-related "stress" cases ascribed to		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	*17*	295	2975	
Ever threatened (%)	*12*	36	16	3.0 (2.3 , 3.9)
Number of threats (%)				
0	*0*	1	2	0.5
1	*0*	10	4	3.6
2	*6*	5	3	2.0
3	*0*	1	1	1.6
4	*0*	1	1	2.1
5-9	*6*	4	2	3.5
10+	*0*	13	3	5.3
Non-response	*0*	1	0	-
Never	*88*	64	84	1.0
Trend test p value				p<0.001

Note: Figures in italics are estimates based on 30 or fewer sample cases

For cases who are currently working the number of threats is in the last year, but for cases who are not working the number of threats is based on a typical year

* *Adjusted to match case profile by age, sex and when employed.*

Table 17: Summary data on work-related stress, depression or anxiety

Sex Age Group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Male							
16-44	35	65	42	87	0.60	0.39	0.81
45-64	45	75	52	97	1.2	0.83	1.5
65-74	1	*1*	*0*	*4*	*0.06*	*0*	*0.19*
75+	1	*2*	*0*	*6*	*0.15*	*0*	*0.46*
All males	82	143	111	175	0.69	0.54	0.85
Female							
16-44	46	68	47	88	0.65	0.46	0.85
45-59	41	65	45	85	1.3	0.89	1.7
60-74	2	*4*	*0*	*10*	*0.10*	*0*	*0.25*
75+	-	-	*0*	*6*	-	*0*	*0.19*
All females	89	136	107	166	0.63	0.50	0.77
All persons							
16-44	81	132	102	163	0.63	0.48	0.77
45-59(F)/64(M)	86	139	109	170	1.2	0.97	1.5
60(F)/65(M)-74	3	*6*	*0*	*12*	*0.09*	*0*	*0.19*
75+	1	*2*	*0*	*6*	*0.06*	*0*	*0.17*
Total	171	279	235	323	0.66	0.56	0.77

Note: Figures in italics are estimates based on 30 or fewer sample cases.

Table 18: Respondent's opinion of what caused their stress, depression or anxiety

How caused	Sample cases	Percentage
Workload & pace	97	55
Pressure of work	47	
Too much work	43	
Lack of resources	14	
Responsibility	7	
Too little work	2	
Other or not specified	2	
Lack of support	46	26
Change	35	20
Reorganisation at work	24	
Career change or instability	12	
Work schedule	22	14
Long hours	18	
Shift work or unsociable hours	4	
Limited rest breaks	3	
Contact with members of public	18	11
Conflict or poor relationships	9	
Attacked or threatened	7	
Other causes	2	
Relationships at work (including bullying, harassment etc)	16	10
Attacked or threatened	16	
General stress	13	7
Other causes	8	6

Note: An individual can be included more than once if they reported more than one of the listed causes
Percentages are based on weighted data

Table 19: Sample numbers, rates (%) and prevalence by occupation for subjects reporting work-related stress, depression or anxiety

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Coal mining	1				1	*3*	*0*	*10*
Teaching	19				24	*37*	*22*	*52*
Nursing	9	*2.2*	*1.4*	*3.0*	11	*18*	*7*	*29*
Armed Forces	1				1	*2*	*0*	*7*
Security (excl. Armed Forces)	3				5	*10*	*0*	*19*
Care workers	9				11	*19*	*8*	*31*
Miscellaneous	1	1.1	0.76	1.4	1	*2*	*0*	*6*
Managerial	21				25	*42*	*24*	*60*
Professional	17				23	*35*	*20*	*49*
Other education & welfare	6				6	*8*	*2*	*15*
Repetitive assembly, inspection	3				3	*6*	*0*	*14*
Literary, artistic & sport	2				2	*4*	*0*	*9*
Secretarial	6				7	*11*	*3*	*19*
Selling	9	0.56	0.40	0.72	9	*14*	*5*	*23*
Clerical	14				15	*21*	*10*	*33*
Science & engineering	5				6	*11*	*2*	*19*
Catering	4				3	*5*	*0*	*11*
Road transport operatives	2				2	*4*	*0*	*9*

continued

Table 19 continued

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Metal processing	2				3	*6*	*0*	*12*
Construction	2				2	*3*	*0*	*8*
Other processing	3	*0.27*	*0.10*	*0.44*	6	*10*	*2*	*17*
Electrical processing	1				1	*2*	*0*	*5*
Cleaner	2				2	*3*	*0*	*8*
Textile processing	-				1	*2*	*0*	*6*
Hair & beauty, Other personal services, Farming, fishing & forestry, Other transport and machinery operatives, Material moving & storing	-	*0*	*0*	*0.15*	-	-	*0*	*6*

Note: Figures in italics are estimates based on 30 or fewer sample cases

** Rate given for groupings of occupations chosen so that the group rates are significantly different*

Table 20: Summary data on work-related stress ascribed illness

Sex Age group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Male							
16-44	31	54	34	73	0.50	0.32	0.68
45-64	46	75	53	98	1.2	0.85	1.5
65-74	14	*24*	*11*	*36*	*1.1*	*0.50*	*1.6*
75+	2	*3*	*0*	*8*	*0.27*	*0*	*0.64*
All males	93	156	124	189	0.76	0.60	0.92
Female							
16-44	34	52	34	69	0.50	0.33	0.67
45-59	24	*35*	*21*	*50*	*0.71*	*0.42*	*0.99*
60-74	7	*11*	*3*	*19*	*0.28*	*0.07*	*0.49*
75+	-	-	*0*	*6*	-	*0*	*0.19*
All females	65	98	74	122	0.46	0.34	0.57
All persons							
16-44	65	105	79	132	0.50	0.37	0.62
45-59(F)/64(M)	70	111	84	138	0.98	0.74	1.2
60(F)/65(M)-74	21	*35*	*20*	*50*	*0.56*	*0.32*	*0.80*
75+	2	*3*	*0*	*8*	*0.10*	*0*	*0.24*
Total	158	254	213	296	0.60	0.51	0.70

Note: Figures in italics are estimates based on 30 or fewer sample cases.

Table 21: Respondent's opinion of what caused their stress ascribed illness

How caused	Sample cases	Percentage
Workload & pace	76	46
Pressure of work	42	
Too much work	29	
Lack of resources	11	
Responsibility	5	
Other causes	3	
General stress	71	43
Work schedule	25	15
Long hours	18	
Shift work or unsociable hou	4	
Limited rest breaks	4	
Lack of support	18	11
Change	10	6
Reorganisation	7	
Other causes	3	
Contact with members of public	9	6
Attacked or threatened	3	
Conflict or poor relationships	2	
Other causes	4	
Relationships at work (including bullying, harassment etc)	8	5
Attacked or threatened	8	
Posture	6	3
Other causes	9	11
Inhale substances	3	
Noise	3	
Visual work	3	

Note: An individual can be included more than once if they reported more than one of the listed causes
Percentages are based on weighted data

Table 22: Sample numbers, rates, (%) and prevalence by occupation for subjects reporting a work-related stress ascribed illness

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Teaching	15	*1.8*	*1.1*	*2.5*	16	*26*	*13*	*40*
Road transport operatives	9				10	*17*	*6*	*27*
Professional	18	*1.0*	*0.64*	*0.14*	21	*32*	*17*	*46*
Science & engineering	10				12	*19*	*8*	*29*
Textile processing	2				3	*6*	*0*	*13*
Security (excl. armed forces)	3				4	*5*	*0*	*11*
Other education & welfare	4				6	*10*	*1*	*19*
Managerial	14				18	*26*	*14*	*39*
Selling	10				11	*17*	*7*	*28*
Nursing	3	0.57	0.42	0.71	6	*9*	*2*	*16*
Construction	4				5	*8*	*1*	*16*
Clerical	11				18	*32*	*16*	*47*
Cleaner	4				4	*7*	*0*	*14*
Secretarial	5				6	*9*	*2*	*16*
Catering	3				4	*8*	*0*	*16*

continued

Table 22 continued

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Material moving and storing	1				1	*2*	*0*	*5*
Metal processing	2				3	*6*	*0*	*12*
Farming,fishing & forestry	1	*0.19*	*0.05*	*0.33*	1	*2*	*0*	*5*
Electrical processing	1				2	*3*	*0*	*8*
Care workers	1				3	*4*	*0*	*9*
Other processing	1				2	*3*	*0*	*7*
Repetitive assembly, inspection	-				2	*4*	*0*	*9*
Literary, artisitic, & sport, Hair & beauty								
Other personal services, Coal mining								
Other transport & machinery operatives	-	*0*	*0*	*0.16*	-	-	*0*	*6*
Armed Forces								
Miscellaneous								

Note: Figures in italics are estimates based on 30 or fewer sample cases

* *Rate given for groupings of occupations chosen so that the group rates are significantly different*

Table 23: Summary data on work-related headache or 'eyestrain'

Sex Age group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Male							
16-44	5	*8*	*1*	*15*	*0.08*	*0.01*	*0.14*
45-64	4	*7*	*0*	*14*	*0.11*	*0*	*0.23*
65-74	-	-	*0*	*6*	-	*0*	*0.17*
75+	-	-	*0*	*6*	-	*0*	*0.28*
All males	9	*15*	*5*	*25*	*0.07*	*0.03*	*0.12*
Female							
16-44	12	*19*	*8*	*29*	*0.18*	*0.08*	*0.28*
45-59	7	*12*	*3*	*21*	*0.24*	*0.06*	*0.43*
60-74	2	*4*	*0*	*8*	*0.09*	*0*	*0.21*
75+	-	-	*0*	*6*	-	*0*	*0.19*
All females	21	*34*	*19*	*49*	*0.16*	*0.09*	*0.23*
All persons							
16-44	17	*27*	*14*	*40*	*0.13*	*0.07*	*0.19*
45-59(F)/64(M)	11	*19*	*8*	*31*	*0.17*	*0.07*	*0.27*
60(F)/65(M)-74	2	*4*	*0*	*8*	*0.06*	*0*	*0.14*
75+	-	-	*0*	*6*	-	*0*	*0.11*
Total	30	*50*	*31*	*68*	*0.12*	*0.07*	*0.16*

Note: Figures in italics are estimates based on 30 or fewer sample cases.

Table 24: Respondent's opinion of what caused their headache or 'eyestrain'

How caused	Sample cases	Percentage
Visual work	26	*85*
VDU work	21	
Lighting	8	
Close work	1	
Exposed to breathing fumes, dusts or other harmful substance	3	*11*
Other causes	5	*15*

Note: An individual can be included more than once if they reported more than one of the listed causes

Percentages are based on weighted data

Table 25: Sample numbers, rates (%) and prevalence by occupation for subjects reporting work-related headache or 'eyestrain'

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		central	95% C.I. lower	95% C.I. upper		central	95% C.I. lower	95% C.I. upper
Professional	2				2	*2*	*0*	*5*
Teaching	1				1	*2*	*0*	*5*
Other education & welfare	1				1	*1*	*0*	*4*
Literary, artistic & sport	1				2	*3*	*0*	*7*
Science & engineering	2				2	*4*	*0*	*9*
Managerial	5	*0.19*	*0.11*	*0.26*	5	*8*	*1*	*15*
Clerical	6				8	*15*	*4*	*25*
Secretarial	3				4	*6*	*0*	*12*
Selling	1				1	*2*	*0*	*5*
Metal processing	1				1	*2*	*0*	*6*
Other processing	1				1	*2*	*0*	*5*
Hair & beauty					1	*2*	*0*	*6*
Cleaner					1	*2*	*0*	*5*
Nursing								
Security (excl. Armed Forces), Catering								
Care workers								
Other personal services								
Farming, fishing & forestry								
Electrical processing, Textile processing	-	*0*	*0*	*0.03*	-	-	*0*	*6*
Repetitive assembly, inspection								
Construction, Coal mining								
Road transport operatives								
Other transport and machinery operatives								
Material moving & storing								
Armed Forces, Miscellaneous								

Note: Figures in italics are estimates based on 30 or fewer sample cases

* *Rate given for groupings of occupations chosen so that the group rates are significantly different*

Table 26: Summary data on work-related deafness, tinnitus or other ear conditions

Sex / Age group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Male							
16-44	9	*15*	*5*	*25*	*0.14*	*0.05*	*0.23*
45-64	42	74	51	97	1.2	0.81	1.5
65-74	31	49	30	67	2.2	1.3	2.9
75+	8	*16*	*3*	*28*	*1.2*	*0.26*	2.1
All males	90	153	119	186	0.74	0.58	0.90
Female							
16-44	2	*3*	*0*	*6*	*0.03*	*0*	*0.06*
45-59	3	*6*	*0*	*12*	*0.12*	*0*	*0.25*
60-74	4	*9*	*0*	*19*	*0.23*	*0*	*0.48*
75+	-	-	*0*	*7*	-	*0*	*0.19*
All females	9	*18*	*5*	*30*	*0.08*	*0.03*	*0.14*
All persons							
16-44	11	*17*	*7*	*28*	*0.08*	*0.03*	*0.13*
45-59(F)/64(M)	45	80	56	104	0.70	0.49	0.91
60(F)/65(M)-74	35	58	37	79	0.93	0.59	1.3
75+	8	*16*	*3*	*28*	*0.44*	*0.09*	*0.79*
Total	99	170	135	206	0.40	0.32	0.49

Note: Figures in italics are estimates based on 30 or fewer sample cases.

Table 27: Severity of work-related deafness

a) Very difficult to follow conversation with background noise

Work-related condition	Sample cases	Percentage responding 'yes'
Deafness	65	92
Tinnitus	6	*49*
Deafness & tinnitus	17	*80*
Other ear conditions	10	*86*
Total	98	87

Note: Percentages are based on weighted data

b) Level of difficulty hearing person speak in quiet room

Work-related condition	Sample cases	Level of difficulty			
		No difficulty (%)	Whisper (%)	Normal (%)	Loud (%)
Deafness	59	39	38	17	7
Tinnitus	3	*68*	32	-	-
Deafness & tinnitus	15	*40*	43	9	9
Other ear conditions	8	*52*	48	-	-
Total	85	42	40	13	6

Note: Percentages are based on weighted data

Table 28: Severity of work-related Tinnitus

Work-related condition		Noises in head eg. ringing, buzzing, whistling		
	Sample cases	Does not suffer severely (%)	Suffers severely (%)	Suffers severe distress all the time (%)
Tinnitus	6	*16*	*47*	*37*
Deafness & tinnitus	17	*15*	*40*	*45*
Total	23	*15*	*42*	*43*

Note: Figures in italics are estimates based on 30 or fewer sample cases.

Percentages are based on weighted data

Table 29: Respondent's opinion of what caused their deafness, tinnitus or other ear conditions

How caused	Sample cases	Percentage
Noise	96	97
Noisy environment	79	
Blasts/Gunfire	23	
Other noise	1	
Other causes	3	*3*

Note: Percentages are based on weighted data

Table 30: Percentage of respondents with work-related deafness, tinnitus or other ear conditions reporting exposure to selected working conditions compared to the percentage exposed in the general working population

a) Raised noise levels in the workplace (need to raise voice)

Raised noise levels in the workplace (need to raise voice)	Work-related hearing cases ascribed to:		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job ≤ 10 years ago	
Sample cases	42	37	3019	
Ever (%)	93	95	45	23 (5.5 , 97)
Time exposed (%)				
Always/nearly always	50	65	11	150.7
About ¾ of the time	10	11	5	44.3
About ½ of the time	10	14	10	30.4
About ¼ of the time	10	3	10	5.0
Less than ¼ of the time	12	3	9	5.2
Non-response	2	0	0	-
Never	7	5	55	1.0
Trend test p value				p<0.001

* *Adjusted to match case profile by age, sex and when employed.*

b) Intensity of noise levels in workplace (ringing in the ears)

Intensity of noise levels in the workplace (ringing in the ears)	Work-related hearing cases ascribed to:		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job ≤ 10 years ago	
Sample cases	41	37	3018	
Ever (%)	71	73	18	14 (6.7 , 31)
Time exposed (%)				
Daily	34	38	8	16.0
Weekly	12	11	4	8.6
Less often	24	24	6	14.1
Never	29	27	82	1.0
Trend test p value				p<0.001#

* *Adjusted to match case profile by age, sex and when employed.*

\# *Trend excluding baseline category: p>0.5*

Table 31: Sample numbers, rates (%) and prevalence by occupation for subjects reporting a work-related deafness, tinnitus or other ear conditions

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Miscellaneous	1				2	*4*	*0*	*11*
Other transport and machinery operatives	2				3	*5*	*0*	*11*
Metal processing	9	*0.81*	*0.42*	*1.2*	31	52	*32*	*72*
Other processing	5				6	*11*	*2*	*20*
Repetitive assembly, inspection	2				2	*3*	*0*	*8*
Teaching	2				2	*3*	*0*	*8*
Science & engineering	2				5	*9*	*1*	*17*
Textile processing	1				2	*2*	*0*	*6*
Farming,fishing & forestry	1				1	*1*	*0*	*4*
Material moving and storing	1	*0.17*	*0.08*	*0.26*	1	*1*	*0*	*3*
Road transport operatives	1				1	*2*	*0*	*5*
Construction	1				3	*5*	*0*	*10*
Secretarial	1				4	*7*	*0*	*15*
Managerial	2				5	*8*	*1*	*15*

continued

Table 31 continued

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Coal mining	-				11	*19*	*7*	*30*
Armed Forces	-				13	*26*	*10*	*42*
Electrical processing	-				1	*1*	*0*	*4*
Clerical	-				1	*2*	*0*	*6*
Catering	-				1	*4*	*0*	*11*
Professional		*0*	*0*	*0.02*	1	*2*	*0*	*4*
Care workers	-							
Nursing, Other education & welfare, Literary, artistic & sport, Selling Security (excluding Armed Forces) Hair & beauty, Cleaner Other personal services	-				-	-	*0*	*6*

Note: Figures in italics are estimates based on 30 or fewer sample cases

* *Rate given for groupings of occupations chosen so that the group rates are significantly different*

Table 32: Estimated prevalence of work-related lower respiratory diseases with asthma and chronic bronchitis symptoms

Symptoms reported	Sample cases	Prevalence estimates (thousands)		
			95% C.I.	
		central	lower	upper
Individual disease group (mutually exclusive)				
Asthma symptoms only	40	72	49	94
Asthma & chronic bronchitis symptoms	42	80	55	105
Other lower respiratory disease* or unspecified	31	51	32	70
Any lower respiratory disease	113	202	163	241
Combination of lower respiratory categories				
Asthma symptoms	82	151	117	185
Chronic bronchitis symptoms	44	83	58	109

** Includes 2 cases reporting chronic bronchitis symptoms*

Table 33: Summary data on work-related lower respiratory diseases

Sex / Age group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Male							
16-44	23	*48*	*28*	*69*	*0.45*	*0.26*	*0.64*
45-64	31	58	37	78	0.91	0.59	1.2
65-74	16	*26*	*12*	*40*	*1.2*	*0.56*	*1.8*
75+	16	*22*	*11*	*33*	*1.7*	*0.83*	*2.6*
All males	86	154	120	188	0.75	0.58	0.91
Female							
16-44	8	*15*	*4*	*25*	*0.14*	*0.04*	*0.24*
45-59	12	*21*	*9*	*33*	*0.42*	*0.18*	*0.66*
60-74	4	*7*	*0*	*13*	*0.17*	*0*	*0.34*
75+	3	*6*	*0*	*13*	*0.26*	*0*	*0.57*
All females	27	*48*	*30*	*67*	*0.22*	*0.14*	*0.31*
All persons							
16-44	31	63	40	86	0.30	0.19	0.41
45-59(F)/64(M)	43	79	54	103	0.69	0.48	0.91
60(F)/65(M)-74	20	*33*	*18*	*48*	*0.53*	*0.28*	*0.78*
75+	19	*28*	*15*	*41*	*0.79*	*0.42*	*1.2*
Total	113	202	163	241	0.48	0.39	0.57

Note: Figures in italics are estimates based on 30 or fewer sample cases.

Table 34: Work-related respiratory disease by description of breathing

Work-related respiratory disease	Sample+ cases	Breathing: Never or rarely get trouble (%)	Breathing: Regular trouble, always gets completely better (%)	Breathing: Never quite right (%)
Individual disease groups (mutually exclusive)				
Asthma symptoms only	40	11	30	60
Asthma & chronic bronchitis symptoms	42	-	8	92
Other lower respiratory disease* or unspecified	29	*41*	*15*	*44*
Any lower respiratory disease	111	14	17	69
Combination of lower respiratory categories				
Chronic bronchitis symptoms	44	-	8	93
Asthma symptoms	82	5	18	77
Pneumoconiosis (includes asbestosis)	13	-	-	*100*

Note: Figures in italics are estimates based on 30 or fewer sample cases

Percentages based on weighted data

\+ *Excludes subjects who reported difficulties walking, or suffering from heart disease*

* *Includes 2 cases reporting chronic bronchitis symptoms*

Table 35: Shortness of breath by work-related respiratory disease

Work-related respiratory disease		Short of breath when walking			
	Sample+ cases	No difficulties (%)	On level ground or up a slight hill (%)	Walking with people own age (%)	Walking at own pace on level ground (%)
Individual disease groups (mutually exclusive)					
Asthma symptoms only	28	*33*	*21*	*8*	*38*
Asthma & chronic bronchitis symptoms	16	*11*	*13*	*16*	*59*
Other lower respiratory disease* or unspecified	19	*58*	*19*	*15*	*9*
Any lower respiratory disease	63	34	18	12	35
Combination of lower respiratory categories					
Chronic bronchitis symptoms	18	17	12	18	53
Asthma symptoms	44	24	18	11	46
Pneumoconiosis (includes Asbestosis)	5	*16*	-	-	*84*

Note: Figures in italics are estimates based on 30 or fewer sample cases

Percentages are based on weighted data

+ Excludes subjects who reported difficulties walking, or suffering from heart disease

** Includes 2 sample cases reporting chronic bronchitis symptoms*

Table 36: Respondent's opinion of what caused their lower respiratory disease

How caused	Sample cases	Percentage
Exposed to breathing fumes, dusts or other harmful substances	102	89
Substances exposed to:		
Coal dust	13	
Cement dust	5	
Cereal dust	5	
Paper or cardboard dust	4	
Textile dust or fibres	4	
Wood dust	3	
Other types of dust or fibres	30	
Motor exhaust fumes	10	
Cigarette smoke	6	
Welding fumes or flux	4	
Foundry fumes	4	
Other types of smoke or fumes	8	
Asbestos	9	
Oils or solvents or paints	8	
Acids or alkalis	6	
Biological	4	
Cleaning materials or detergents	3	
Plastics or rubber or resins or adhesives	2	
Other substances (including allergens & irritants)	6	
Indoor environment	13	12
Passive smoking	7	
Draft or hot or cold	5	
Other	1	
Outdoor (including mines)	6	6
Other causes	6	29

Note: An individual can be included more than once if they reported more than one of the listed causes
Percentages are based on weighted data

Table 37: Percentage of respondents with work-related lower respiratory complaint reporting exposure to breathing fumes, dusts or other harmful substances to the percentage exposed in the general working population

Breathing fumes, dusts or other harmful substances	Work-related lower respiratory cases ascribed to:		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	40	59	3014	
Ever (%)	98	98	43	95.0 (13 , 696)
Time exposed (%)				
Always/nearly always	83	66	17	137.0
About ¾ of the time	3	2	5	13.8
About ½ of the time	8	19	6	107.2
About ¼ of the time	0	5	7	18.9
Less than ¼ of the time	5	5	8	13.4
Non-response	0	2	0	-
Never	3	2	57	1.0
Trend test p value				p<0.001

* *Adjusted to match case profile by age, sex and when employed.*

Table 38: Sample numbers, rates (%) and prevalence by occupation for subjects reporting any work-related lower respiratory disease

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Coal mining	3	*22*	*0.69*	*44*	15	*25*	*12*	*39*
Road transport operatives	6				7	*13*	*3*	*23*
Other processing	9				15	*30*	*15*	*45*
Textile processing	2	0.87	0.56	1.2	5	*11*	*1*	*20*
Farming,fishing & forestry	3				5	*8*	*1*	*16*
Metal processing	6				23	*40*	*23*	*57*
Cleaner	5				6	*11*	*2*	*21*
Repetitive assembly, inspection	2				3	*6*	*0*	*12*
Construction	2				7	*13*	*3*	*23*
Literary, artistic & sport	1				1	*2*	*0*	*5*
Care workers	2				2	*4*	*0*	*10*
Security (excl. Armed Forces)	1				2	*2*	*0*	*6*
Nursing	1	*0.19*	*0.11*	*0.28*	1	*2*	*0*	*6*
Material moving and storing	1				1	*1*	*0*	*4*
Other education & welfare	1				1	*2*	*0*	*6*
Managerial	4				7	*12*	*3*	*20*
Selling	2				3	*5*	*0*	*10*
Clerical	2				4	*7*	*0*	*15*
Science & engineering	1				1	*2*	*0*	*5*

continued

Table 38 continued

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Other personal services	-				1	*2*	*0*	*4*
Professional, Teaching, Secretarial	-							
Hair & beauty, Electrical processing		*0*	*0*	*0.05*				
Other transport & machinery operatives					-	-	*0*	*7*
Catering, Armed Forces, Miscellaneous								

Note Figures in italics are estimates based on 30 or fewer sample cases

* *Rate given for groupings of occupations chosen so that the group rates are significantly different*

Table 39: Summary data on work-related lower respiratory disease with asthmatic sypmtoms

Sex / Age group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Male							
16-44	14	*29*	*14*	*45*	*0.27*	*0.13*	*0.42*
45-64	26	*50*	*30*	*69*	*0.79*	*0.48*	*1.1*
65-74	13	*22*	*9*	*36*	*1.0*	*0.42*	*1.6*
75+	10	*14*	*5*	*23*	*1.1*	*0.41*	*1.8*
All males	63	116	86	146	0.56	0.42	0.71
Female							
16-44	7	*13*	*3*	*23*	*0.13*	*0.03*	*0.22*
45-59	6	*11*	*2*	*20*	*0.21*	*0.04*	*0.39*
60-74	3	*5*	*0*	*11*	*0.13*	*0*	*0.28*
75+	3	*6*	*0*	*13*	*0.27*	*0*	*0.57*
All females	19	*35*	*19*	*51*	*0.16*	*0.09*	*0.24*
All persons							
16-44	21	*43*	*24*	*61*	*0.20*	*0.11*	*0.29*
45-59(F)/64(M)	32	61	39	83	0.53	0.34	0.73
60(F)/65(M)-74	16	*28*	*13*	*42*	*0.45*	*0.21*	*0.68*
75+	13	*20*	*9*	*31*	*0.57*	*0.26*	*0.89*
Total	82	151	117	185	0.36	0.28	0.44

Note: Figures in italics are estimates based on 30 or fewer sample cases

Table 40: Smoking habit of respondents reporting work-related asthma* in the main survey and asthma* in the control population

Smoking habit	Main survey	Control population+
Sample cases	82	356
Percentage of:		
Non-smokers	37	29
Ex-smokers	41	44
Current smokers	21	26

* *Asthma symptoms.*

\+ *Adjusted to match case profile by age and sex.*

Table 41: Respondent's opinion of what caused their asthma*

How caused	Sample cases	Percentage
Exposed to breathing fumes, dusts or other harmful substances	75	*90*
Substances exposed to:		
Coal dust	10	
Cement dust	5	
Paper or cardboard dust	4	
Other types of dust or fibres	32	
Smoke or fumes		
Cigarette smoke	5	
Motor exhaust fumes	5	
Foundry fumes	4	
Other types of smoke or fumes	8	
Asbestos	9	
Oils or solvents or paints	5	
Acids or alkalis	4	
Cleaning materials or detergents	2	
Other substances	5	
Indoor environment	10	*12*
Passive smoking	5	
Draft hot or cold	4	
Lack of ventilation or poor air conditioning	1	
Outdoor (including mines)	3	*5*
Other causes	2	*4*

Note: An individual can be included more than once if they reported more than one of the listed causes
Percentages are based on weighted data

* *Lower respiratory disease with asthmatic symptoms*

Table 42: Summary data on work-related lower respiratory disease with chronic bronchitis symptoms

Sex Age group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Male							
16-44	7	*16*	*4*	*27*	*0.15*	*0.03*	*0.26*
45-64	16	*31*	*16*	*47*	*0.50*	*0.25*	*0.74*
65-74	10	*17*	*6*	*29*	*0.78*	*0.26*	*1.3*
75+	6	*8*	*1*	*15*	*0.63*	*0.11*	*1.2*
All males	39	73	49	96	0.35	0.24	0.47
Female							
16-44	2	*5*	*0*	*11*	*0.05*	*0*	*0.11*
45-59	-	-	*0*	*8*	-	*0*	*0.08*
60-74	1	*2*	*0*	*6*	*0.05*	*0*	*0.14*
75+	2	*4*	*0*	*9*	*0.18*	*0*	*0.42*
All females	5	*10*	*1*	*20*	*0.05*	*0.01*	*0.09*
All persons							
16-44	9	*20*	*7*	*34*	*0.10*	*0.03*	*0.16*
45-59(F)/64(M)	16	*31*	*16*	*47*	*0.28*	*0.14*	*0.41*
60(F)/65(M)-74	11	*19*	*7*	*32*	*0.31*	*0.11*	*0.51*
75+	8	*12*	*3*	*21*	*0.34*	*0.10*	*0.59*
Total	44	83	58	109	0.20	0.14	0.26

Note: Figures in italics are estimates based on 30 or fewer sample cases

Table 43: Smoking habit of respondents reporting work-related chronic bronchitis* in the main survey and chronic bronchitis* in the control population

Smoking habit	Main survey	Control population+
Sample cases	44	96
Percentage of:		
Non-smokers	35	10
Ex-smokers	31	32
Current smokers	34	59

* *Chronic bronchitis symptoms.*

\+ *Adjusted to match case profile by age and sex.*

Table 44: Respondent's opinion of what caused their chronic bronchitis*

How caused	Sample cases	Percentage
Exposed to breathing fumes, dusts or other harmful substances	41	91
Substances exposed to:		
Coal dust	8	
Other types of dust or fibres	25	
Smoke or fumes	12	
Asbestos	5	
Oils or solvents or paints	2	
Cleaning materials or detergents	1	
Other substances	3	
Other causes	6	*18*

Note: An indvidual can be included more than once if they reported more than one of the listed causes

* *Lower respiratory disease with chronic bronchitis symptoms*

Table 45: Summary data on work-related pneumoconiosis (including asbestosis)

Sex Age group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Male							
16-44	-	-	*0*	*5*	-	*0*	*0.04*
45-64	1	*2*	*0*	*6*	*0.03*	*0*	*0.09*
65-74	7	*9*	*2*	*15*	*0.40*	*0.10*	*0.69*
75+	4	*6*	*0*	*12*	*0.47*	*0.01*	*0.93*
All males	12	*17*	*7*	*26*	*0.08*	*0.04*	*0.13*
Female							
16-44	-	-	*0*	*7*	-	*0*	*0.04*
45-59	-	-	*0*	*7*	-	*0*	*0.08*
60-74	1	*2*	*0*	*6*	*0.05*	*0*	*0.15*
75+	-	-	-	*7*	-	*0*	*0.19*
All females	1	*2*	*0*	*6*	*0.01*	*0*	*0.03*
All persons							
16-44	-	-	*0*	*5*	-	*0*	*0.02*
45-59(F)/64(M)	1	*2*	*0*	*6*	*0.02*	*0*	*0.05*
60(F)/65(M)-74	8	*11*	*3*	*19*	*0.18*	*0.05*	*0.30*
75+	4	*6*	*0*	*12*	*0.17*	*0*	*0.34*
Total	13	*19*	*8*	*29*	*0.04*	*0.02*	*0.07*

Note: Figures in italics are estimates based on 30 or fewer sample cases

Table 46: Respondent's opinion of what caused their pneumoconiosis (including asbestosis)

How caused	Sample cases	Percentage
Exposed to breathing fumes, dusts or other harmful substances	13	*100*
Substances exposed to:		
Coal dust	5	
Other dusts	2	
Asbestos	5	
Oils or solvents or paints	1	

Table 47: Summary data on work-related skin disease

Sex / Age group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Male							
16-44	12	*22*	*9*	*35*	*0.20*	*0.08*	*0.32*
45-64	8	*14*	*4*	*24*	*0.22*	*0.06*	*0.38*
65-74	1	*2*	*0*	*6*	*0.09*	*0*	*0.26*
75+	1	*1*	*0*	*4*	*0.10*	*0*	*0.29*
All males	22	*39*	*22*	*56*	*0.19*	*0.11*	*0.27*
Female							
16-44	9	*18*	*6*	*30*	*0.18*	*0.06*	*0.29*
45-59	2	*4*	*0*	*10*	*0.08*	*0*	*0.19*
60-74	2	*4*	*0*	*10*	*0.11*	*0*	*0.26*
75+	-	-	*0*	*8*	-	*0*	*0.19*
All females	13	*27*	*12*	*41*	*0.12*	*0.06*	*0.19*
All persons							
16-44	21	*40*	*23*	*58*	*0.19*	*0.11*	*0.27*
45-59(F)/64(M)	10	*18*	*7*	*29*	*0.16*	*0.06*	*0.26*
60(F)/65(M)-74	3	*6*	*0*	*13*	*0.10*	*0*	*0.21*
75+	1	*1*	*0*	*4*	*0.04*	*0*	*0.11*
Total	35	66	43	88	*0.15*	*0.10*	*0.21*

Note: Figures in italics are estimates based on 30 or fewer sample cases

Table 48: Respondent's opinion of what caused their skin disease

How caused	Sample cases	Percentage
Handling or touching harmful substances (including allergens & irritants)	33	95
Substances exposed to:		
Cleaning materials or detergents	9	
Oils or solvents or paints	6	
Dusts or fibres	5	
Acid or alkalis	3	
Plastics or rubber or resins or adhesives	3	
Biological (including pathogens)	1	
Other substances	7	
Wearing personal protective equipment	3	
Wet work	2	
Other causes	3	*7*

Note: An individual can be included more than once if they reported more than one of the listed causes
Percentages are based on weighted data

Table 49: Percentage of respondents with work-related skin complaint reporting exposure to selected working conditions compared to the percentage exposed in the general working population

a) Handling or touching harmful substances or materials

Handling or touching harmful substances or materials	Work-related skin disease cases ascribed to:		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	2	27	3014	
Ever (%)	*100*	*70*	28	6.2 (2.6 , 14)
Time exposed (%)				
Always/nearly always	*100*	*37*	5	17.2
About ¾ of the time	*0*	*11*	2	16.6
About ½ of the time	*0*	*0*	3	-
About ¼ of the time	*0*	*7*	6	2.8
Less than ¼ of the time	*0*	*11*	11	2.7
Non-response	*0*	*4*	0	-
Never	*0*	*30*	72	1.0
Trend test p value				p<0.001

Note: Figures in italics are estimates based on 30 or fewer sample cases

* *Adjusted to match case profile by age, sex and when employed*

b) Uncomfortable heat or cold (including hot & cold weather)

Uncomfortable heat or cold including hot & cold weather	Work-related skin disease cases ascribed to:		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	2	33	1513	
Ever (%)	*100*	76	43	4.4 (1.9 , 10)
Time exposed (%)				
Always/nearly always	*0*	33	12	6.8
About ¾ of the time	*0*	9	3	7.0
About ½ of the time	*50*	21	13	3.6
About ¼ of the time	*0*	3	8	0.8
Less than ¼ of the time	*50*	9	7	3.4
Never	*0*	24	57	1.0
Trend test p value				p<0.001#

Note: Figures in italics are estimates based on 30 or fewer sample cases

* *Adjusted to match case profile by age, sex and when employed*

 # Trend excluding baseline category: p~0.02

Table 50: Sample numbers, rates (%) and prevalence by occupation for subjects reporting a work-related skin disease

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		central	95% C.I. lower	upper		central	95% C.I. lower	upper
Hair & beauty	2				2	*5*	*0*	*11*
Farming,fishing & forestry	2				2	*4*	*0*	*9*
Repetitive assembly, inspection	2				2	*5*	*0*	*11*
Construction	3				3	*6*	*0*	*13*
Nursing	2				2	*4*	*0*	*9*
Road transport operatives	2	*0.41*	*0.23*	*0.58*	2	*4*	*0*	*9*
Catering	2				2	*5*	*0*	*11*
Other processing	3				4	*7*	*0*	*15*
Science & engineering	3				3	*4*	*0*	*10*
Material moving and storing	1				1	*2*	*0*	*5*
Metal processing	2				4	*6*	*0*	*12*
Cleaner	1				4	*8*	*0*	*15*
Selling	1	*0.09*	*0.01*	*0.17*	1	*3*	*0*	*8*
Clerical	1				1	*1*	*0*	*3*
Textile processing	-				1	*2*	*0*	*7*
Coal mining	-				1	*1*	*0*	*4*
Professional, Teaching								
Other education & welfare								
Literary, artistic & sport								
Managerial, Secretarial, Care workers		*0*	*0*	*0.03*				
Other personal services, Electrical processing	-				-	-	*0*	*7*
Other transport & machinery operatives								
Security (excl. Armed Forces)								
Armed Forces, Miscellaneous								

Note: Figures in italics are estimates based on 30 or fewer sample cases

** Rate given for groupings of occupations chosen so that the group rates are significantly different*

Table 51: Summary data on work-related vibration white finger

Sex Age group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Male							
16-44	6	*10*	*2*	*18*	*0.09*	*0.02*	*0.17*
45-64	10	*19*	*7*	*31*	*0.30*	*0.11*	*0.49*
65-74	3	*7*	*0*	*16*	*0.31*	*0*	*0.69*
75+	-	-	*0*	*7*	-	*0*	*0.28*
All males	19	*36*	*19*	*53*	*0.17*	*0.09*	*0.26*
Female							
16-44	-	-	*0*	*7*	-	*0*	*0.04*
45-59	-	-	*0*	*7*	-	*0*	*0.08*
60-74	-	-	*0*	*7*	-	*0*	*0.10*
75+	-	-	*0*	*7*	-	*0*	*0.19*
All females	-	-	*0*	*7*	-	*0*	*0.02*
All persons							
16-44	6	*10*	*2*	*18*	*0.05*	*0.01*	*0.09*
45-59(F)/64(M)	10	*19*	*7*	*31*	*0.17*	*0.06*	*0.27*
60(F)/65(M)-74	3	*7*	*0*	*16*	*0.11*	*0*	*0.25*
75+	-	-	*0*	*7*	-	*0*	*0.11*
Total	19	*36*	*19*	*53*	*0.85*	*0.05*	*0.12*

Note: Figures in italics are estimates based on 30 or fewer sample cases

Table 52: Respondent's opinion of what caused their vibration white finger

How caused	Sample cases	Percentage
Vibration	19	*100*
Hand power tools	19	
Other causes	2	*18*

Note: Figures in italics are estimates based on 30 or fewer sample cases
An individual can be included more than once if they reported more than one of the listed causes
Percentages are based on weighted data

Table 53: Percentage of respondents with work-related vibration white finger (VWF) reporting exposure to selected working conditions compared to the percentage exposed in the general working population

a) Use of power tools

Use of power tools	Work-related VWF cases ascribed to:		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	7	12	3018	
Ever (%)	*86*	*100*	28	undefined
Time exposed (%)				
Always/nearly always	*29*	*50*	6	4.2
About ¾ of the time	*43*	*8*	3	1.9
About ½ of the time	*0*	*17*	5	1.9
About ¼ of the time	*14*	*8*	6	0.6
Less than ¼ of the time	*0*	*17*	9	1.0
Non-response	*0*	*0*	0	-
Never	*14*	*0*	72	-
Trend test p value				p~0.03

Note: Figures in italics are estimates based on 30 or fewer sample cases

* *Adjusted to match case profile by age, sex and when employed*

b) Use of vibrating machine or vehicle

Use of vibrating machine or vehcile	Work-related VWF cases ascribed to:		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	7	12	3018	
Ever (%)	*43*	*25*	13	2.2 (0.6 , 8.1)
Time exposed (%)				
Always/nearly always	*14*	*17*	4	4.3
About ¾ of the time	*0*	*0*	2	-
About ½ of the time	*14*	*0*	2	-
About ¼ of the time	*14*	*8*	2	3.9
Less than ¼ of the time	*0*	*0*	3	-
Never	*57*	*75*	87	1.0
Trend test p value				p~0.1

Note: Figures in italics are estimates based on 30 or fewer sample cases

* *Adjusted to match case profile by age, sex and when employed.*

Table 54: Sample numbers, rates (%) and prevalence by occupation for males reporting work-related vibration white finger

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
			95% C.I.				95% C.I.	
		central	lower	upper		central	lower	upper
Metal processing	3				9	*16*	*5*	*26*
Construction	3				4	*8*	*0*	*15*
Other processing	2	*0.37*	*0.14*	*0.61*	2	*4*	*0*	*9*
Repetitive assembly, inspection	1				2	*6*	*0*	*15*
Other transport and machinery operatives	1				1	*2*	*0*	*5*
Coal mining	-				1	*1*	*0*	*4*
Professional, Teaching, Nursing, Other education & welfare, Literary, artistic & sport, Science & engineering, Managerial Clerical, Secretarial, Selling, Security (excl. Armed Forces), Catering, Care workers, Hair & beauty, Cleaner, Other personal services, Farming, fishing & forestry, Electrical processing, Textile processing, Road transport operatives, Material moving & storing, Armed Forces, Miscellaneous	-				-	-	0	7

Note: Figures in italics are estimates based on 30 or fewer sample cases

* *Rate given for groupings of occupations chosen so that the group rates are significantly different*

Table 55: Summary data on work-related musculoskeletal disorders

Sex Age group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Male							
16-44	152	277	231	323	2.6	2.2	3.0
45-64	173	303	256	349	4.8	4.1	5.5
65-74	34	54	35	74	2.4	1.6	3.3
75+	11	*16*	*6*	*25*	*1.2*	*0.49*	*1.9*
All males	370	650	581	718	3.2	2.8	3.5
Female							
16-44	120	193	158	228	1.9	1.5	2.2
45-59	137	218	181	255	4.3	3.6	5.1
60-74	41	73	50	95	1.8	1.3	2.4
75+	11	*22*	*9*	*35*	*0.98*	*0.40*	*1.6*
All females	309	505	448	563	2.3	2.1	2.6
All persons							
16-44	272	470	412	528	2.2	2.0	2.5
45-59(F)/64(M)	310	521	459	582	4.6	4.1	5.1
60(F)/65(M)-74	75	127	97	157	2.1	1.6	2.5
75+	22	*37*	*21*	*54*	*1.1*	*0.61*	*1.5*
Total	679	1155	1064	1246	2.7	2.5	3.0

Note: Figures in italics are estimates based on 30 or fewer sample cases

Table 56: Estimated prevalence of work-related musculoskeletal disorders by part of the body affected (each reported illness is shown once against the site or combination of sites affected)

Affected part of body	Sample cases	Prevalence estimates (thousands)		
			95% C.I.	
		central	lower	upper
Back	293 (1)	508 (2)	448	569
Upper limbs or neck (ULN)	225 (6)	375 (10)	324	425
Lower limbs (LL)	58	100	74	127
More than one site				
Back & ULN	38	66	44	88
Back & LL	24	*41*	*24*	*58*
ULN & LL	21	*37*	*21*	*53*
Back & ULN & LL	21	*34*	*19*	*48*
Internal	23	*37*	*22*	*53*
Whole body	6	*9*	*2*	*17*
All persons	679 (35)	1155 (61)	1064	1246

Note: Figures in brackets show the number of people who reported more than one illness of the same type
Figures in italics are estimates based on 30 or fewer sample cases

Table 57: Estimated prevalence of work-related musculoskeletal disorders by affected site (case counted in each category where the named part of the body was affected)

Affected part of body (any mention)	Sample cases	Prevalence estimates (thousands)		
			95% C.I.	
		central	lower	upper
Back	372 (5)	642 (9)	574	710
Upper limbs or neck	302 (9)	506 (15)	447	565
neck*	80 (1)	132 (1)	102	162
other	226 (4)	381 (7)	330	433
Lower limbs	124	212	174	250
Internal	23	*37*	*22*	*53*
Whole body#	6	*9*	*2*	*17*
All persons	679 (35)	1155 (61)	1064	1246

Note: Figures in brackets show the number of people who reported more than one illness of the same type
Figures in italics are estimates based on 30 or fewer sample cases
* *Neck is the only part of the body affected.*
\# *Respondents saying their whole body was affected have only been included in the "whole body" category*

Table 58: Work-related musculoskeletal disorders by affected site

Musculoskeletal disorders	Sample Cases	Affected site: Back	Affected site: Upper limbs or neck (ULN)	Affected site: Lower limbs (LL)
		%	%	%
Carpal tunnel syndrome	18	-	*100*	-
Frozen shoulder	7	-	*100*	-
Tenosynovitis	16	-	*100*	-
"RSI"	26	-	*100*	-
Tennis elbow or golfer's elbow	36	-	*100*	-
Disc problem	105	83	9	-
Trapped nerve	16	*62*	*32*	-
Rheumatoid arthritis	16	*5*	*16*	*8*
Arthritis	86	25	14	17
Osteo-arthritis	53	25	23	19
Sciatica or lumbago	33	52	3	4
Spondylosis	31	14	70	-
Spondylitis	23	*26*	*32*	-
Hernia of abdominal cavity	19	-	-	-
Non-specific				
- Back pain or strain	126	100	-	-
- Muscle or tendon disorders	30	11	69	-
- Ligament, cartilage or joint disorders	46	4	40	50
- Other disorders	29	*7*	*59*	*28*
All musculoskeletal disorders	716	42	32	8

Note: Figures in italics are estimates based on 30 or fewer sample cases

Percentages based on weighted data

continued

Table 58 continued

Back & ULN	Back & LL	ULN & LL	Back & ULN & LL	Whole body	Internal
%	%	%	%	%	%
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
9	-	-	-	-	-
5	-	-	-	-	-
27	-	*21*	*11*	*12*	-
4	11	12	13	4	-
6	-	14	12	-	-
-	41	-	-	-	-
16	-	-	-	-	-
42	-	-	-	-	-
-	-	-	-	-	*100*
-	-	-	-	-	-
6	-	-	-	-	*14*
2	-	2	2	-	-
3	*3*	-	-	-	-
5	3	3	3	1	3

Table 59: Respondent's opinion of what caused their musculoskeletal disorder

How caused	Sample cases	Percentage
Manual Handling	367	52
Lifting	320	
Carrying	49	
Pushing and pulling	13	
Other	31	
Posture	198	28
Bending or stooping	73	
Prolonged sitting or driving	32	
Prolonged standing	25	
Kneeling or crawling	18	
Poor workstation ergonomics	18	
Reaching or stretching	14	
Twisting	8	
Confined space	8	
Other	29	
Repetitive work	129	18
Typing	53	
Other	80	
Physical work	79	11
Accident	70	10
Accident while manual handling	66	
Other	4	
Outdoor (including mines)	29	4
Indoor environment	15	2
Draft or hot or cold	15	
Other	1	
Vibration	13	2
Handpower tools	11	
Vibrating machinery or vehicles	2	
Applied force	10	1
Handling or touching harmful substances (including allergens & irritants)	5	1
Workload and pace	3	0
Work schedule	3	1
Contact with members of the public	3	0
Other causes	11	2

Note: An individual can be included more than once if they reported more than one of the listed causes

Percentages are based on weighted data

Table 60: Characteristics of tasks identified as leading to a work-related musculoskeletal disorder, by site of complaint

Characteristics of task	All Musculo-skeletal disorders	Affected site			
		Back	Upper limbs or neck (ULN)	Lower limbs (LL)	Back & ULN
Sample Cases*	564	229	187	46	29
Percentage# of subjects reporting that the task(s) involved:					
Repeating same sequence of movements many times	90	83	97	91	*96*
Working in awkward or tiring positions	81	83	73	81	*95*
Working very fast	64	57	73	59	*79*
Using appreciable force	72	81	58	78	*68*
Lifting or moving heavy loads	78	94	53	75	*84*
Twisting or stooping when lifting or moving heavy loads+	96	96	95	94	*100*
Repeated gripping and releasing or pinching between finger and thumb	55	45	61	54	*68*
Repeated gripping and releasing between finger and palm	57	55	53	59	*61*
Maintaining a fixed bent thumb position	48	40	50	55	*65*
Bending the wrist a lot	70	60	79	68	*78*
Working with hands at or above shoulder height	51	52	44	62	*52*
Kneeling	46	54	25	64	*52*
Leaning forward from the waist	85	94	71	77	*93*

Note: Figures in italics are estimates based on 30 or fewer sample cases

continued overleaf

* *Subjects reporting that a particular work task or set of work tasks led to their complaint*

\+ *Based on subjects reporting lifting or moving heavy loads.*

\# *Percentages are based on weighted data*

Table 60: Characteristics of tasks identified as leading to a work-related musculoskeletal disorder, by site of complaint (continued)

Characteristics of task	Affected site			
	Back & LL	ULN & LL	Back & ULN & LL or whole body	Internal
Sample Cases*	21	16	20	16
Percentage# of subjects reporting that the task(s) involved:				
Repeating same sequence of movements many times	*87*	*93*	*100*	*89*
Working in awkward or tiring positions	*95*	*100*	*94*	*75*
Working very fast	*55*	*65*	*80*	*27*
Using appreciable force	*82*	*85*	*77*	*69*
Lifting or moving heavy loads	*90*	*82*	*96*	*100*
Twisting or stooping when lifting or moving heavy loads+	*100*	*100*	*95*	*100*
Repeated gripping and releasing or pinching between finger and thumb	*54*	*74*	*71*	*53*
Repeated gripping and releasing between finger and palm	*66*	*93*	*63*	*45*
Maintaining a fixed bent thumb position	*52*	*82*	*64*	*34*
Bending the wrist a lot	*67*	*100*	*85*	*69*
Working with hands at or above shoulder height	*57*	*73*	*72*	*46*
Kneeling	*56*	*85*	*69*	*36*
Leaning forward from the waist	*95*	*89*	*94*	*93*

Note: Figures in italics are estimates based on 30 or fewer sample cases

* *Subjects reporting that a particular work task or set of work tasks led to their complaint*

\+ *Based on subjects reporting lifting or moving heavy loads.*

\# *Percentages are based on weighted data*

Table 61: Characteristics of tasks identified as leading to a work-related musculoskeletal disorder, by disorders

Characteristics of task(s)	Musculoskeletal disorders				
	Carpal tunnel syndrome	Frozen shoulder	Teno-synovitis	"RSI"	Tennis elbow or golfer's elbow
Sample cases*	14	5	15	22	28
Percentage# of subjects reporting that the task(s) involved:					
Repeating same sequence of movements many times	*100*	*100*	*100*	*100*	*93*
Working in awkward or tiring positions	*57*	*78*	*53*	*63*	*66*
Working very fast	*85*	*80*	*75*	*94*	*56*
Using appreciable force	*48*	*100*	*36*	*31*	*62*
Lifting or moving heavy loads	*29*	*78*	*37*	*19*	*55*
Twisting or stooping when lifting or moving heavy loads+	*100*	*100*	*100*	*49*	*100*
Repeated gripping and releasing or pinching between finger and thumb	*70*	*80*	*50*	*56*	*73*
Repeated gripping and releasing between finger and palm	*36*	*80*	*38*	*59*	*66*
Maintaining a fixed bent thumb position	*58*	*14*	*52*	*62*	*40*
Bending the wrist a lot	*80*	*35*	*85*	*79*	*77*
Working with hands at or above shoulder height	*42*	*86*	*23*	*12*	*42*
Kneeling	*27*	*64*	*8*	*4*	*25*
Leaning forward from the waist	*65*	*100*	*52*	*60*	*73*

Note: Figures in italics are estimates based on 30 or fewer sample cases

continued overleaf

* *Subjects reporting that a particular work task or set of work tasks led to their complaint.*

\+ *Based on subjects reporting lifting or moving heavy loads.*

\# *Percentages based on weighted data*

Table 61: Characteristics of tasks identified as leading to a work-related musculoskeletal disorder, by disorders (continued)

Characteristics of task(s)	Musculoskeletal disorders				
	Disc problem	Trapped nerve	Rheumatoid arthritis	Arthritis	Osteo-arthritis
Sample cases*	75	8	9	73	44
Percentage# of subjects reporting that the task(s) involved:					
Repeating same sequence of movements many times	82	*100*	*100*	92	95
Working in awkward or tiring positions	84	*100*	*92*	86	93
Working very fast	61	*58*	*91*	67	72
Using appreciable force	88	*100*	*58*	79	76
Lifting or moving heavy loads	95	*91*	*79*	85	77
Twisting or stooping when lifting or moving heavy loads+	98	*100*	*100*	97	97
Repeated gripping and releasing or pinching between finger and thumb	33	*46*	*62*	64	72
Repeated gripping and releasing between finger and palm	48	*67*	*58*	74	64
Maintaining a fixed bent thumb position	40	*30*	*62*	61	62
Bending the wrist a lot	57	*79*	*78*	88	87
Working with hands at or above shoulder height	57	*43*	*46*	67	59
Kneeling	54	*64*	*70*	60	60
Leaning forward from the waist	96	*100*	*68*	88	95

continued

Note: Figures in italics are estimates based on 30 or fewer sample cases

* *Subjects reporting that a particular work task or set of work tasks led to their complaint.*

\+ *Based on subjects reporting lifting or moving heavy loads.*

\# *Percentages based on weighted data*

Table 61 continued

Characteristics of task(s)	Musculoskeletal disorders				
	Sciatica or lumbago	Spondy-losis	Spondy-litis	Hernia of abdominal cavity	Back pain or strain
Sample cases*	25	30	18	12	103
Percentage# of subjects reporting that the task(s) involved:					
Repeating same sequence of movements many times	*86*	*93*	*100*	*85*	78
Working in awkward or tiring positions	*100*	*89*	*97*	*66*	78
Working very fast	*61*	*68*	*63*	*19*	52
Using appreciable force	*92*	*62*	*76*	*66*	74
Lifting or moving heavy loads	*90*	*72*	*77*	*100*	95
Twisting or stooping when lifting or moving heavy loads+	*94*	*90*	*100*	*100*	95
Repeated gripping and releasing or pinching between finger and thumb	*54*	*59*	*62*	*54*	43
Repeated gripping and releasing between finger and palm	*59*	*45*	*63*	*43*	52
Maintaining a fixed bent thumb position	*45*	*47*	*60*	*28*	37
Bending the wrist a lot	*66*	*74*	*73*	*58*	51
Working with hands at or above shoulder height	*58*	*50*	*56*	*45*	43
Kneeling	*79*	*34*	*55*	*42*	47
Leaning forward from the waist	*90*	*81*	*94*	*90*	94

Note: Figures in italics are estimates based on 30 or fewer sample cases

continued overleaf

* *Subjects reporting that a particular work task or set of work tasks led to their complaint.*

\+ *Based on subjects reporting lifting or moving heavy loads.*

\# *Percentages based on weighted data*

Table 61: Characteristics of tasks identified as leading to a work-related musculoskeletal disorder, by disorders (continued)

Characteristics of task(s)	Musculoskeletal disorders		
	Muscle or tendon disorders	Ligament, cartilage or joint disorders	Other disorders
Sample cases*	28	34	21
Percentage# of subjects reporting that the task(s) involved:			
Repeating same sequence of movements many times	*96*	97	*97*
Working in awkward or tiring positions	*92*	71	*77*
Working very fast	*61*	63	*80*
Using appreciable force	*64*	78	*58*
Lifting or moving heavy loads	*81*	67	*62*
Twisting or stooping when lifting or moving heavy loads+	*95*	95	*100*
Repeated gripping and releasing or pinching between finger and thumb	*49*	72	*48*
Repeated gripping and releasing between finger and palm	*60*	55	*49*
Maintaining a fixed bent thumb position	*63*	58	*36*
Bending the wrist a lot	*81*	77	*75*
Working with hands at or above shoulder height	*53*	63	*48*
Kneeling	*28*	41	*27*
Leaning forward from the waist	*73*	70	*73*

Note: Figures in italics are estimates based on 30 or fewer sample cases

* *Subjects reporting that a particular work task or set of work tasks led to their complaint.*

\+ *Based on subjects reporting lifting or moving heavy loads.*

\# *Percentages based on weighted data*

Table 62: Percentage of respondents with work-related musculoskeletal disorder reporting exposure to selected working conditions compared to the percentage exposed in the general working population

a) Repeating same sequence of movements many times

Repeating movements in the workplace	Work-related musculoskeletal cases ascribed to:		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	110	572	3021	
Ever (%)	94	93	68	6.8 (4.8 , 9.5)
Time exposed (%)				
Always/nearly always	65	56	38	7.3
About ¾ of the time	10	13	12	5.3
About ½ of the time	10	12	9	5.8
About ¼ of the time	5	7	6	5.7
Less than ¼ of the time	3	5	3	8.0
Non-response	0	1	0	-
Never	6	7	32	1.0
Trend test p value				p<0.001#

* *Adjusted to match case profile by age, sex and when employed.*

\# *Trend exluding baseline category: p>0.5*

b) Working in awkward or tiring positions

Working in awkward or tiring positions	Work-related musculoskeletal cases ascribed to:		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	109	570	3020	
Ever (%)	90	86	47	6.9 (5.4 , 8.9)
Time exposed (%)				
Always/nearly always	51	37	17	7.9
About ¾ of the time	7	10	7	5.2
About ½ of the time	14	18	10	6.8
About ¼ of the time	11	11	8	4.8
Less than ¼ of the time	6	9	5	6.7
Non-response	0	1	0	-
Never	10	14	53	1.0
Trend test p value				p<0.001#

* *Adjusted to match case profile by age, sex and when employed.*

continued overleaf

\# *Trend exluding baseline category: p~0.03*

Table 62 continued

c) Working very fast

Working very fast	Work-related musculoskeletal cases ascribed to:		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	110	572	3022	
Ever (%)	74	73	59	1.9 (1.5 , 2.3)
Time exposed (%)				
Always/nearly always	31	34	19	2.7
About ¾ of the time	11	9	9	1.5
About ½ of the time	13	14	15	1.5
About ¼ of the time	12	8	11	1.2
Less than ¼ of the time	6	7	5	2.0
Non-response	1	0	0	-
Never	26	27	41	1.0
Trend test p value				p<0.001

* *Adjusted to match case profile by age, sex and when employed.*

d) Using appreciable force

Using appreciable force	Work-related musculoskeletal cases ascribed to:		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	109	570	3002	
Ever (%)	87	71	28	6.7 (5.4 , 8.3)
Time exposed (%)				
Always/nearly always	33	24	7	9.6
About ¾ of the time	13	9	4	6.6
About ½ of the time	18	15	7	6.5
About ¼ of the time	12	11	5	5.5
Less than ¼ of the time	8	11	5	5.3
Non-response	3	1	0	-
Never	13	29	72	1.0
Trend test p value				p<0.001

* *Adjusted to match case profile by age, sex and when employed.*

continued

Table 62 continued

e) Lifting or moving heavy loads

Lifting or moving heavy loads	Work-related musculoskeletal cases ascribed to:		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	110	566	3020	
Ever (%)	88	82	52	4.2 (3.4 , 5.4)
Time exposed (%)				
Always/nearly always	40	30	11	8.1
About ¾ of the time	7	12	5	6.0
About ½ of the time	13	15	11	4.3
About ¼ of the time	19	11	11	2.9
Less than ¼ of the time	7	12	13	2.5
Non-response	2	1	0	-
Never	12	18	48	1.0
Trend test p value				p<0.001

* *Adjusted to match case profile by age, sex and when employed.*

f) Twisting or stooping when lifting or moving heavy loads

Twisting or stooping when lifting or moving heavy loads	Work-related musculoskeletal cases ascribed to:		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	94	450	1511	
Ever (%)	98	99	87	13.0 (5.1 , 31)
Time exposed (%)				
Always/nearly always	59	52	21	25.6
About ¾ of the time	11	11	9	12.3
About ½ of the time	11	15	22	8.6
About ¼ of the time	11	11	17	6.9
Less than ¼ of the time	6	10	19	5.4
Non-response	1	1	0	-
Never	2	1	13	1.0
Trend test p value				p<0.001

* *Adjusted to match case profile by age, sex and when employed.*

continued overleaf

Table 62 continued

g) Use of power tools

Use of power tools	Work-related musculoskeletal cases ascribed to:		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	108	566	3018	
Ever (%)	39	32	20	2.0 (1.6 , 2.5)
Time exposed (%)				
Always/nearly always	9	9	5	2.2
About ¾ of the time	6	2	2	1.5
About ½ of the time	4	4	3	1.6
About ¼ of the time	10	9	4	3.0
Less than ¼ of the time	10	8	6	1.8
Non-response	0	0	0	-
Never	61	68	80	1.0
Trend test p value				p<0.001#

** Adjusted to match case profile by age, sex and when employed.*

 # Trend exluding baseline category: p>0.5

h) Use of vibrating machine or vehicle

Use of vibrating machine or vehicle	Work-related musculoskeletal cases ascribed to:		Control population*	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	108	566	3018	
Ever (%)	22	15	7	2.4 (1.8 , 3.2)
Time exposed (%)				
Always/nearly always	9	5	2	2.4
About ¾ of the time	3	1	1	0.7
About ½ of the time	3	3	1	3.3
About ¼ of the time	2	2	1	1.8
Less than ¼ of the time	6	5	2	3.1
Never	78	85	93	1.0
Trend test p value				p<0.001#

** Adjusted to match case profile by age, sex and when employed.*

 # Trend exluding baseline category: p>0.5

continued

Table 62 continued

i) Uncomfortable heat or cold (including hot or cold weather)

Uncomfortable heat or cold (including hot or cold weather)	Work-related musculoskeletal cases ascribed to:		Control population*+	Relative risk(RR) (95% CI)
	Job > 10 years ago	Job ≤ 10 years ago	Job in last 10 years	
Sample cases	108	571	1513	
Ever (%)	72	61	42	2.3 (1.9 , 2.9)
Time exposed (%)				
Always/nearly always	29	21	11	3.4
About ¾ of the time	7	4	3	2.0
About ½ of the time	14	14	13	1.8
About ¼ of the time	12	11	8	2.3
Less than ¼ of the time	9	10	6	2.4
Never	28	39	58	1.0
Trend test p value				p<0.001#

* *Adjusted to match case profile by age, sex and when employed.*

\+ *Results from the ONS Omnibus Survey, October 1995.*

\# *Trend excluding baseline category: p~0.03*

Table 63: Sample numbers, rates (%) and prevalence by occupation for subjects reporting a work-related musculoskeletal disorder

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Coal mining	2				11	*18*	*7*	*29*
Nursing	30				46	77	55	100
Other processing	51	5.8	4.7	6.8	66	118	88	148
Construction	36				58	96	69	123
Miscellaneous	5				8	*10*	*2*	*19*
Electrical processing	16				25	*40*	*22*	*58*
Material moving and storing	15				22	*36*	*21*	*52*
Care workers	35				46	73	51	95
Farming, fishing & forestry	18	4.1	3.4	4.9	28	*43*	*26*	*60*
Textile processing	11				17	*27*	*14*	*41*
Armed Forces	4				11	*16*	*6*	*25*
Road transport operatives	19				27	*46*	*27*	*64*
Metal processing	29				44	77	54	101
Other transport and machinery operatives	5				8	*12*	*3*	*21*
Other education & welfare	16				20	*28*	*15*	*42*
Repetitive assembly, inspection	13	2.7	2.1	3.3	20	*34*	*18*	*50*
Other personal services	4				7	*8*	*1*	*16*
Literary, artistic & sport	7				13	*24*	*11*	*38*

continued

Table 63 continued

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Teaching	14				18	*30*	*16*	*45*
Secretarial	18				27	*42*	*25*	*58*
Security (excl. Armed Forces)	7				8	*11*	*3*	*19*
Cleaner	15				24	*38*	*22*	*54*
Managerial	30	1.5	1.3	1.8	37	64	43	85
Clerical	37				49	70	49	90
Hair & beauty	2				2	*3*	*0*	*8*
Selling	20				27	*41*	*25*	*57*
Science & engineering	11				13	*22*	*10*	*34*
Professional	14	*0.79*	*0.44*	*1.2*	16	*23*	*11*	*35*
Catering	6				10	*16*	*6*	*27*

Note: Figures in talics are estimates based on 30 or fewer sample cases

* *Rate given for groupings of occupations chosen so that the group rates are significantly different*

Table 64: Estimated prevalence of work-related musculoskeletal disorders affecting the back

Affected sites	Sample cases	Prevalence estimates (thousands)		
			95% C.I.	
		central	lower	upper
Back only	293 (1)	508 (2)	448	569
Back & ULN	38	66	44	88
Back & LL	24	*41*	*24*	*58*
Back & ULN & LL	21	*34*	*19*	*48*
"Back affected" (all persons)	372 (5)	642 (9)	574	710

Note: Figures in italics are estimates based on 30 or fewer sample cases
Figures in brackets show the number of people who reported more than one musculoskeletal disorder affecting the same part of the body

Table 65: Summary data on work-related musculoskeletal disorders affecting the back

Sex / Age group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Male							
16-44	103	190	152	227	1.8	1.4	2.1
45-64	95	164	130	199	2.6	2.1	3.1
65-74	17	*28*	*14*	*43*	*1.2*	*0.63*	1.9
75+	4	*6*	*0*	*12*	*0.48*	*0*	*0.96*
All males	219	389	335	442	1.9	1.6	2.1
Female							
16-44	64	81	135	344	1.0	0.79	1.3
45-59	67	81	133	315	2.1	1.6	2.6
60-74	17	*15*	*44*	*78*	*0.75*	*0.39*	1.1
75+	5	*1*	*17*	*25*	*0.40*	*0.05*	*0.75*
All females	153	254	213	295	1.2	0.99	1.4
All persons							
16-44	167	298	251	344	1.4	1.2	1.6
45-59(F)/64(M)	162	271	227	315	2.4	2.0	2.8
60(F)/65(M)-74	34	58	38	78	0.94	0.61	1.3
75+	9	*15*	*5*	*25*	*0.43*	*0.14*	*0.71*
Total	372	642	574	710	1.5	1.4	1.7

Note: Figures in italics are estimates based on 30 or fewer sample cases

Table 66: Types of work-related musculoskeletal disorders affecting the back

Musculoskeletal disorders	Sample cases	Percentage
Disc problem	96	25
Trapped nerve	11	*3*
Rheumatoid arthritis (including ankylosing spondylitis)	7	*2*
Arthritis (including rheumatism)	45	12
Osteo-arthritis	23	*6*
Sciatica or lumbago	32	9
Spondylosis	9	*2*
Spondylitis	15	*4*
Non-specific		
-Back pain or strain	126	35
-Muscle or tendon disorders	5	*1*
-Ligament, cartilage or joint disorders	4	*1*
-Other disorders	4	*1*

Note: Figures in italics are estimates based on 30 or fewer sample cases.
Percentages are based on weighted data

Table 67: Respondent's opinion of what caused their musculoskeletal disorder which affected their back

How caused	Sample cases	Percentage
Manual handling	247	66
Lifting	221	
Carrying	28	
Other or unspecified	22	
Pushing and pulling	4	
Posture	113	30
Bending or stooping	55	
Prolonged standing	16	
Prolonged sitting or driving	15	
Poor workstation ergonomics	9	
Reaching or stretching	7	
Kneeling or crawling	6	
Twisting	5	
Other	17	
Accident	58	16
Accident while manual handling	55	
Other	3	
Physical work	36	9
Repetitive work	14	*3*
Typing	2	
Other tasks	12	
Outdoor (including mines)	13	*4*
Indoor environment	7	*2*
Draft or hot or cold	7	
Other	1	
Other causes	12	*3*

Note: Figures in italics are estimates based on 30 or fewer sample cases
An individual can be included more than once if they reported more than one of the listed causes
Percentages are based on weighted data

Table 68: Sample numbers, rate (%) and prevalence by occupation for subjects reporting a work-related musculoskeletal disorder affecting the back

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Coal mining	2				6	*10*	*2*	*18*
Nursing	21				33	56	37	75
Construction	23				34	62	40	84
Miscellaneous	3				4	*8*	*0*	*16*
Other processing	28	3.4	2.8	4.0	37	70	46	94
Electrical processing	9				13	*26*	*11*	*42*
Care workers	25				33	54	35	72
Material moving and storing	9				15	*26*	*12*	*39*
Farming, fishing & forestry	10				17	*27*	*14*	*40*
Armed Forces	2	2.3	1.5	3.0	7	*10*	*2*	*17*
Road transport operatives	11				17	*31*	*16*	*47*
Other transport and machinery operatives	4				7	*11*	*2*	*19*

continued

Table 68 continued

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Metal processing	16				26	*46*	*28*	*64*
Other education & welfare	11				12	*20*	*8*	*31*
Teaching	10				11	*20*	*8*	*32*
Textile processing	4	1.5	1.1	1.8	6	*8*	*1*	*15*
Cleaner	11				14	*20*	*9*	*31*
Security (excl. Armed Forces)	5				6	*9*	*2*	*16*
Other personal services	2				4	*5*	*0*	*10*
Managerial	14				16	*29*	*15*	*44*
Science & engineering	6				7	*12*	*3*	*20*
Hair & beauty	1				1	*2*	*0*	*5*
Selling	9	0.60	0.42	0.78	12	*19*	*8*	*30*
Clerical	12				14	*22*	*10*	*34*
Repetitive assembly, inspection	2				4	*10*	*0*	*20*
Literary, artistic & sport	1				6	*12*	*2*	*21*
Professional	5				5	*7*	*1*	*13*
Catering	2	*0.24*	*0.09*	*0.39*	3	*5*	*0*	*10*
Secretarial	2				3	*4*	*0*	*8*

Note: Figures in italics are estimates based on 30 or fewer sample cases

* *Rate given for groupings of occupations chosen so that the group rates are significantly different*

Table 69: Estimated prevalence of work-related musculoskeletal disorders affecting the upper limbs or neck

Affected sites	Sample cases	Prevalence estimates (thousands)		
			95% C.I.	
		central	lower	upper
Upper limbs or neck (ULN) only	225 (6)	375 (10)	324	425
Back & ULN	38	66	44	88
ULN & LL	21	*37*	*21*	*53*
Back & ULN & LL	21	*34*	*19*	*48*
"Upper limbs or neck affected" (all persons)	302 (9)	506 (15)	447	565

Note: Figures in brackets show the number of people who reported more than one musculoskeletal disorder affecting the same part of the body.
Figures in italics are estimates based on 30 or fewer sample cases.

Table 70: Summary data on work-related musculoskeletal disorders affecting the upper limbs or neck

Sex / Age group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Male							
16-44	46	85	59	110	0.79	0.55	1.0
45-64	70	119	91	148	1.9	1.4	2.3
65-74	12	*21*	*9*	*34*	*0.94*	*0.39*	*1.5*
75+	3	*5*	*0*	*10*	*0.35*	*0*	*0.76*
All males	131	230	189	270	1.1	0.92	1.31
Female							
16-44	58	89	65	113	0.86	0.63	1.1
45-59	84	134	105	163	2.7	2.1	3.2
60-74	24	*44*	*26*	*62*	*1.1*	*0.67*	*1.6*
75+	5	*10*	*1*	*18*	*0.44*	*0.05*	*0.83*
All females	171	277	234	319	1.3	1.1	1.5
All persons							
16-44	104	174	139	208	0.82	0.66	0.99
45-59(F)/64(M)	154	253	212	295	2.2	1.9	2.6
60(F)/65(M)-74	36	65	43	87	1.0	0.70	1.4
75+	8	*14*	*4*	*24*	*0.41*	*0.12*	*0.69*
Total	302	506	447	565	1.2	1.1	1.3

Note: Figures in italics are estimates based on 30 or fewer sample cases.

Table 71: Types of work-related musculoskeletal disorders affecting the upper limbs or neck

Musculoskeletal disorders	Sample cases	Percentage
Carpal tunnel syndrome	18	*6*
Frozen shoulder	7	*3*
Tenosynovitis	16	*5*
"RSI"	26	*8*
Tennis elbow or golfer's elbow	36	12
Disc problem	18	*6*
Trapped nerve	6	*2*
Rheumatoid arthritis (including ankylosing spondylitis)	12	*4*
Arthritis (including rheumatism)	36	12
Osteo-arthritis	29	*9*
Spondylosis	27	*8*
Spondylitis	17	*6*
Non-specific		
-Muscle or tendon disorders	23	*7*
-Ligament, cartilage or joint disorders	22	*7*
-Other disorders	18	*6*

Note: Figures in italics are estimates based on 30 or fewer sample cases.
Percentages are based on weighted data

Table 72: Work-related musculoskeletal disorders affecting the upper limbs or neck, and percentage suffering from selected symptoms

Musculoskeletal disorders affecting upper limbs or neck	Sample cases+	Symptoms					
		Aches and pains	Swelling	Tenderness	Loss of strength	Limitation of move-ment	Numbness or tingling (pins and needles)
		%*	%*	%*	%*	%*	%*
Carpal tunnel syndrome	16	*91*	*61*	*73*	*92*	*84*	*95*
Frozen shoulder	7	*100*	*47*	*84*	*90*	*100*	*61*
Tenosynovitis	16	*100*	*67*	*87*	*96*	*79*	*56*
"RSI"	25	*97*	*56*	*88*	*87*	*81*	*52*
Tennis elbow or golfer's elbow	36	100	38	98	*83*	83	41
Disc problem	16	*100*	*35*	*94*	*89*	*100*	*68*
Trapped nerve	4	*100*	-	*78*	*78*	*100*	*78*
Rheumatoid arthritis	11	*100*	*74*	*84*	*70*	*86*	*68*
Arthritis	35	97	63	82	*79*	88	65
Osteo-arthritis	29	*100*	*67*	*90*	*93*	*100*	*79*
Spondylosis	25	*100*	*40*	*68*	*84*	*86*	*79*
Spondylitis	17	*100*	*50*	*63*	*70*	*80*	*78*
Muscle or tendon disorders	23	*100*	*43*	*82*	*71*	*82*	*58*
Ligament, cartilage or joint disorders	22	*96*	*42*	*64*	*82*	*79*	*46*
Other disorders	18	*94*	*33*	*90*	*80*	*78*	*39*
All disorders	300	98	51	83	83	86	62

Note: Percentages are based on weighted data

* *Percentage responding yes*

\+ *Subjects responding to symptoms questions*

Table 73: Respondent's opinion of what caused their musculoskeletal disorder which affected their upper limbs or neck

How caused	Sample cases	Percentage
Repetitive work	119	38
Repetitive tasks	72	
Typing	51	
Manual handling	114	37
Lifting	92	
Carrying	21	
Pushing and pulling	5	
Other or unspecified	11	
Posture	73	23
Bending or stooping	20	
Prolonged sitting or driving	17	
Poor workstation ergonomics	11	
Reaching or stretching	8	
Prolonged standing	7	
Kneeling or crawling	4	
Confined space	4	
Twisting	3	
Other	13	
Physical work	32	10
Outdoor (including mines)	14	5
Accident	12	4
Accident while manual handling	10	
Other	2	
Vibration	11	4
Handpower tools	9	
Vibrating machinery or vehicles	2	
Applied force	10	3
Indoor environment	7	2
Draft or hot or cold	7	
Other	1	
Other causes	14	5

Note: An individual can be included more than once if they reported more than one of the listed causes

Percentages are based on weighted data

Table 74: Sample numbers, rates (%) and prevalence by occupation for subjects reporting a work-related musculoskeletal disorder affecting the upper limbs or neck

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Armed Forces	3				5	*7*	*1*	*13*
Construction	18				24	*44*	*26*	*62*
Textile processing	7	2.4	1.7	3.1	11	*18*	*7*	*29*
Other processing	21				24	*42*	*25*	*60*
Miscellaneous	2				3	*3*	*0*	*8*
Road transport operatives	11				13	*22*	*10*	*34*
Other personal services	3				4	*7*	*0*	*14*
Repetitive assembly, inspection	10				14	*24*	*11*	*37*
Material moving and storing	5				5	*9*	*1*	*17*
Secretarial	16				23	*38*	*22*	*54*
Literary, artistic & sport	5	1.4	1.2	1.7	6	*11*	*2*	*20*
Care workers	12				15	*27*	*13*	*40*
Electrical processing	5				7	*12*	*2*	*22*
Nursing	8				13	*18*	*8*	*28*
Metal processing	11				16	*29*	*14*	*43*
Clerical	29				36	53	35	72

continued

Table 74 continued

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Other education & welfare	4				4	*7*	*0*	*14*
Professional	13				14	*21*	*10*	*33*
Teaching	4				5	*8*	*1*	*15*
Hair & beauty	1				1	*2*	*0*	*5*
Farming,fishing & forestry	3				6	*10*	*2*	*18*
Selling	11				13	*20*	*9*	*32*
Cleaner	7	0.62	0.47	0.78	12	*20*	*8*	*31*
Managerial	11				14	*25*	*12*	*38*
Science & engineering	5				6	*10*	*2*	*19*
Catering	4				6	*10*	*2*	*18*
Security (excl. armed forces)	2				2	*2*	*0*	*6*
Coal mining	-				2	*4*	*0*	*9*
Other transport and machinery operatives	-				-	-	*0*	*6*

Note: Figures in italics are estimates based on 30 or fewer sample cases

** Rate given for groupings of occupations chosen so that the group rates are significantly different*

Table 75: Estimated prevalence of work-related musculoskeletal disorders affecting the lower limbs

Affected sites	Sample cases	Prevalence estimates (thousands)		
			95% C.I.	
		central	lower	upper
Lower limbs only	58	100	74	127
Back & LL	24	*41*	*24*	*58*
ULN & LL	21	*37*	*21*	*53*
Back & ULN & LL	21	*34*	*19*	*48*
"Lower limbs affected" (all persons)	124	212	174	250

Note: Figures in italics are estimates based on 30 or fewer sample cases

Table 76: Summary data on work-related musculoskeletal disorders affecting the lower limbs

Sex / Age group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Male							
16-44	21	*39*	*22*	*56*	*0.36*	*0.20*	*0.52*
45-64	39	69	47	92	1.1	0.75	1.5
65-74	15	*23*	*11*	*35*	*1.1*	*0.49*	*1.6*
75+	6	*8*	*2*	*14*	*0.59*	*0.12*	*1.1*
All males	81	139	108	170	0.67	0.52	0.83
Female							
16-44	8	*13*	*4*	*22*	*0.12*	*0.04*	*0.21*
45-59	16	*26*	*13*	*40*	*0.52*	*0.26*	*0.79*
60-74	15	*26*	*13*	*39*	*0.65*	*0.32*	*0.98*
75+	4	*8*	*0*	*16*	*0.36*	*0*	*0.73*
All females	43	73	51	95	0.34	0.24	0.44
All persons							
16-44	29	*52*	*32*	*71*	*0.24*	*0.15*	*0.34*
45-59(F)/64(M)	55	96	70	122	0.84	0.61	1.1
60(F)/65(M)-74	30	*49*	*31*	*67*	*0.78*	*0.50*	*1.1*
75+	10	*16*	*6*	*26*	*0.45*	*0.16*	*0.74*
Total	124	212	174	250	0.50	0.41	0.59

Note: Figures in italics are estimates based on 30 or fewer sample cases.

Table 77: Types of musculoskeletal disorders affecting the lower limbs

Musculoskeletal disorders	Sample cases	Percentage
Rheumatoid arthritis (including ankylosing spondylitis)	6	*5*
Arthritis (including rheumatism)	44	36
Osteo-arthritis	25	*19*
Sciatica or lumbago	16	*12*
Non-specific		
-Ligament, cartilage or joint disorders	24	*21*
-Other disorders	9	*7*

Note: Figures in italics are estimates based on 30 or fewer sample cases.
Percentages are based on weighted data

Table 78: Respondent's opinion of what caused the musculoskeletal disorders which affected their lower limbs

How caused	Sample cases	Percentage
Manual handling	54	43
Lifting	48	
Carrying	7	
Pushing and pulling	2	
Other or unspecified	2	
Posture	50	42
Kneeling or crawling	15	
Bending or stooping	13	
Prolonged standing	13	
Prolonged sitting or driving	4	
Other	8	
Physical work	32	27
Outdoor (including mines)	18	*16*
Repetitive work	10	*7*
Indoor environment	6	*4*
Draft or hot or cold	6	
Other	1	
Accident	5	*4*
Manual handling	5	
Vibration	3	*2*
Handling or touching harmful substances (including allergens & irritants)	3	*2*
Other causes	7	*6*

Note: Figures in italics are estimates based on 30 or fewer sample cases
An individual can be included more than once if they reported more than one of the listed causes.
Percentages are based on weighted data

Table 79: Sample numbers, rates (%) and prevalence by occupation for subjects reporting a work-related musculoskeletal disorder affecting their lower limbs

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Electrical processing	6				9	*13*	*4*	*21*
Textile processing	4				6	*9*	*2*	*16*
Material moving and storing	4	*1.2*	*0.72*	*1.7*	6	*11*	*2*	*20*
Armed Forces	1				3	*6*	*0*	*12*
Farming,fishing & forestry	4				6	*11*	*2*	*20*
Construction	7				12	*21*	*9*	*33*
Care workers	6				9	*16*	*6*	*27*
Road transport operatives	4				4	*8*	*0*	*16*
Miscellaneous	1				1	*1*	*0*	*3*
Other processing	6	*0.67*	*0.39*	*0.94*	8	*12*	*3*	*20*
Security (excl. Armed Forces)	2				2	*3*	*0*	*8*
Other education & welfare	4				4	*6*	*0*	*12*
Other transport and machinery operatives	1				2	*3*	*0*	*8*

continued

Table 79 continued

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Nursing	2				6	*11*	*2*	*20*
Teaching	3				5	*8*	*1*	*16*
Literary, artistic & sport	1				1	*2*	*0*	*6*
Repetitive assembly, inspection	2	*0.36*	*0.19*	*0.53*	4	*7*	*0*	*14*
Managerial	6				8	*15*	*5*	*26*
Metal processing	3				7	*13*	*3*	*23*
Cleaner	2				5	*9*	*1*	*16*
Selling	2	*0.13*	*0.03*	*0.24*	4	*8*	*0*	*15*
Clerical	3				5	*7*	*1*	*13*
Coal mining	-				4	*8*	*0*	*16*
Science & engineering	-	*0*	*0*	*0.05*	1	*1*	*0*	*4*
Professional, Secretarial, Catering, Hair & beauty, Other personal services	-				-	-	*0*	*6*

Note: Figures in italics are estimates based on 30 or fewer sample cases

** Rate given for groupings of occupations chosen so that the group rates are significantly different*

Table 80: Summary data on work-related trauma

Sex Age group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Male							
16-44	7	*12*	*3*	*20*	*0.11*	*0.03*	*0.19*
45-64	3	*5*	*0*	*10*	*0.08*	*0*	*0.17*
65-74	-	-	*0*	*6*	-	*0*	*0.17*
75+	1	*1*	*0*	*4*	*0.12*	*0*	*0.34*
All males	11	*18*	*7*	*29*	*0.09*	*0.03*	*0.14*
Female							
16-44	6	*9*	*2*	*17*	*0.09*	*0.02*	*0.16*
45-59	3	*5*	*0*	*10*	*0.10*	*0*	*0.21*
60-74	1	*2*	*0*	*5*	*0.04*	*0*	*0.13*
75+	-	-	*0*	*6*	-	*0*	*0.19*
All females	10	*16*	*6*	*26*	*0.07*	*0.03*	*0.12*
All persons							
16-44	13	*21*	*9*	*32*	*0.10*	*0.04*	*0.15*
45-59(F)/64(M)	6	*10*	*2*	*18*	*0.08*	*0.02*	*0.16*
60(F)/65(M)-74	1	*2*	*0*	*5*	*0.03*	*0*	*0.08*
75+	1	*1*	*0*	*4*	*0.04*	*0*	*0.13*
Total	21	*34*	*19*	*48*	*0.80*	*0.05*	*0.11*

Note: Figures in italics are estimates based on 30 or fewer sample cases.

Table 81: Respondent's opinion of what caused their trauma

How caused	Sample cases	Percentage
Contact with members of the public	12	*50*
Attacked or threatened	10	
Conflict or poor relationships	2	
Manual handling	4	*17*
Lifting	3	
Carrying	2	
Other	1	
Posture	2	*9*
Workload & pace	2	*8*
Other causes	5	*24*

Note: Figures in italics are estimates based on 30 or fewer sample cases
An individual can be included more than once if they reported more than one of the listed causes
Percentages are based on weighted data

Table 82: Sample numbers, rates (%) and prevalence by occupation for subjects reporting trauma

Occupation group	Illnesses ascribed to their current/most recent job				All cases			
	Sample cases	Rate* (%)			Sample cases	Prevalence estimates (thousands)		
		95% C.I.				95% C.I.		
		central	lower	upper		central	lower	upper
Nursing	4				5	*7*	*0*	*13*
Literary, artistic & sport	1				1	*2*	*0*	*5*
Security (excl. Armed Forces)	3	*0.49*	*0.18*	*0.80*	4	*4*	*0*	*9*
Other processing	1				1	*2*	*0*	*5*
Construction	2				2	*3*	*0*	*8*
Professional	1				1	*1*	*0*	*4*
Other education & welfare	1				1	*1*	*0*	*3*
Managerial	1	*0.08*	*0.01*	*0.14*	1	*2*	*0*	*5*
Catering	1				2	*3*	*0*	*8*
Metal processing	-				1	*2*	*0*	*5*
Repetitive assembly, inspection	-				1	*2*	*0*	*5*
Road transport operatives	-				1	*1*	*0*	*4*
Armed Forces	-				1	*2*	*0*	*6*
Miscellaneous					1	*2*	*0*	*5*
Teaching, Clerical, Secretarial, Selling								
Care workers, Hair & beauty, Cleaner								
Other personal services	-	*0*	*0*	*0.02*				
Farming, fishing & forestry					-	-	*0*	*6*
Electrical processing								
Textile processing, Coal mining								
Other transport & machinery operatives								
Material moving & storing								
Science & engineering								

Note: Figures in italics are estimates based on 30 or fewer sample cases

* *Rate given for groupings of occupations chosen so that the group rates are significantly different*

Table 83: Summary data on work-related 'other' diseases

Sex / Age group	Sample cases	Prevalence estimates (thousands)			Rates per 100 ever employed		
			95% C.I.			95% C.I.	
		central	lower	upper	central	lower	upper
Male							
16-44	7	*14*	*3*	*24*	*0.12*	*0.03*	*0.22*
45-64	10	*18*	*7*	*29*	*0.28*	*0.11*	*0.46*
65-74	4	*6*	*0*	*11*	*0.25*	*0*	*0.49*
75+	3	*4*	*0*	*8*	*0.30*	*0*	*0.63*
All males	24	*41*	*24*	*57*	*0.21*	*0.12*	*0.28*
Female							
16-44	10	*17*	*6*	*28*	*0.16*	*0.06*	*0.27*
45-59	10	*16*	*6*	*26*	*0.32*	*0.12*	*0.51*
60-74	3	*4*	*0*	*9*	*0.11*	*0*	*0.23*
75+	2	*4*	*0*	*10*	*0.18*	*0*	*0.43*
All females	25	*41*	*24*	*57*	*0.19*	*0.11*	*0.27*
All persons							
16-44	17	*30*	*16*	*45*	*0.15*	*0.07*	*0.22*
45-59(F)/64(M)	20	*34*	*19*	*49*	*0.31*	*0.16*	*0.43*
60(F)/65(M)-74	7	*10*	*2*	*17*	*0.16*	*0.04*	*0.28*
75+	5	*8*	*1*	*15*	*0.22*	*0.02*	*0.42*
Total	49	82	58	105	0.20	0.14	0.25

Note: Figures in italics are estimates based on 30 or fewer sample cases.

Table 84: Respondent's opinion of what caused their 'other' illness

a) Varicose veins

How caused	Sample cases	Percentage
Posture	7	*89*
Prolonged standing	7	
Other causes	3	*47*

b) Upper respiratory

How caused	Sample cases	Percentage
Exposed to breathing fumes, dusts or other harmful substances	7	*65*
Contact with infectious agent	2	*16*
Other causes	3	*30*

c) Other illnesses

How caused	Sample cases	Percentage
Manual handling	7	*22*
Lifting	7	
Pushing and pulling	1	
Posture	5	*17*
Prolonged standing	2	
Prolonged sitting/driving	2	
Other	1	
Indoor environment	5	*17*
Draft hot or cold	3	
Lack of ventilation or poor air conditioning	2	
Infectious agent	5	*18*
Exposed to breathing fumes, dusts or other harmful substances	4	*12*
Work schedule	3	*12*
Other Causes	7	*21*

Note: Figures in italics are estimates based on 30 or fewer sample cases
An individual can be included more than once if they reported more than one of the listed causes
Percentages are based on weighted data

Table 85: Prevalence of work-related illness by economic activity and working days lost (LAST UPDATED SEPTEMBER 1999)

Economic impact category	Prevalence estimate (thousands)		
		95% C.I.	
	central	lower	upper
No job in last 12 months			
Retired	313	265	361
Inactive	408	353	462
With job in last 12 months			
Nil days lost	672	605	738
1day or less	*37*	*20*	*53*
2-5 days lost	154	122	186
6-10 days lost	112	85	140
11-20 days lost	95	72	119
21-40 days lost	108	83	134
41-65 days lost	42	26	57
66-130 days lost	*42*	*26*	*58*
131-260 days lost	*34*	*18*	*49*
All persons	2017	1897	2136

Note: Figures in italics are estimates based on 30 or fewer sample cases

Table 86: Estimated annual days off work due to a work-related illness and average days lost per worker, by region (LAST UPDATED SEPTEMBER 1999)

Region	Days lost (thousands)			Average days lost per worker*		
		95% C.I.			95% C.I.	
	central	lower	upper	central	lower	upper
North	792	268	1315	0.55	0.19	0.91
Yorkshire and Humberside	2087	506	3668	0.85	0.21	1.49
North West	1840	926	2755	0.64	0.32	0.95
West Midlands	1155	435	1876	0.45	0.17	0.72
East Midlands	2177	722	3633	1.05	0.35	1.75
South West	1414	648	2179	0.59	0.27	0.90
East Anglia	589	199	979	0.53	0.18	0.88
South East (excluding London)	3565	2055	5075	0.64	0.37	0.91
London	1103	379	1827	0.33	0.12	0.55
Wales	1043	259	1827	0.80	0.20	1.40
Scotland	2202	967	3438	0.88	0.39	1.37
Great Britain (All persons)	17967	14500	21400	0.65	0.53	0.77

** Working population in last 12 months*

Table 87: Estimated annual days off work due to work-related illness, by disease group (LAST UPDATED SEPTEMBER 1999)

Disease group	Days lost (thousands)			Average days lost per case+		
		95% C.I.			95% C.I.	
	central	lower	upper	central	lower	upper
Stress	6465	4418	8512	16.16	11.49	20.82
Stress, depression or anxiety	4593	2724	6462	19.57	12.39	26.76
Stress ascribed illness	2284	1287	3281	13.02	7.81	18.23
Lower respiratory disease	535	136	933	6.74	2.05	11.43
Musculoskeletal disorders	9862	7224	12500	13.08	9.80	16.35
Back affected	4820	3085	6555	11.39	7.54	15.24
ULN affected	4162	2565	5758	13.25	8.49	18.00
LL affected	2204	741	3668	21.19	8.40	33.98
Other illnesses #	1654	778	2529	7.29	3.67	10.92
All persons *	17967	14500	21400	13.86	11.40	16.32

** Days lost sum to more than 17967 thousand because individuals who took the same time off due to more than one type of illness or due to a musculoskeletal disorder affecting more than one site are counted in each illness group.*

+ "case" refers to persons suffering from a particular type of work-related illness.

 # The "Other illnesses" category includes the following disease groups which were used in the SWI95 report: Deafness, tinnitus or other ear conditions; skin disease; headache or eyestrain; vibration white finger; pneumoconiosis; trauma and other diseases.
Cases reporting: deafness, tinnitus or other ear conditions; headache and eyestrain or pneumoconiosis take a lower number of days off work than the overall average but numbers are too small to give a precise estimate.
Cases reporting skin disease take a similar average number of days off work to the estimate reported in the 1990 SWI survey. Based on these results sufferers of skin disease took around half million days off work in 1995 (a more specific estimate can not be provided as the sample numbers in the 1995 survey are too small).

Table 88: Annual days off due to work-related illness, by occupation group (LAST UPDATED SEPTEMBER 1999)

Occupation group	Days lost (thousands)			Average days lost per worker +			Workforce : Estimated number of people who worked at some time in the last year (thousands)		
		95% C.I.			95% C.I.				
	central	lower	upper	central	lower	upper	central	lower	upper
Coal mining							14	4	24
Nursing							704	647	760
Security & protective services (excl. armed forces)	5128	2724	7533	1.87	1.00	2.74	461	414	509
Construction							943	875	1010
Farming, fishing & forestry							621	561	682
Material moving and storing							503	454	553
Other personal services							232	198	266
Other processing							1275	1197	1353
Road transport operatives	6576	4486	8667	0.85	0.58	1.12	800	738	861
Metal processing							1328	1249	1407
Electrical processing							546	495	597
Clerical							3077	2958	3196
Care workers							1142	1072	1212
Literary, artistic & sports							485	435	536
Miscellaneous	1827	1139	2516	0.53	0.34	0.73	116	92	139
Repetitive assembly, inspection							639	583	694
Teaching							1037	964	1110

continued

Table 88 continued

Occupation group	Days lost (thousands)			Average days lost per worker +			Workforce : Estimated number of peop worked at some time in the last year (th		
		95% C.I.			95% C.I.				
	central	lower	upper	central	lower	upper	central	lower	upper
Other transport and machinery operatives							240	206	274
Other education & welfare							904	838	971
Selling							2023	1926	2120
Managerial	3259	2234	4284	0.37	0.26	0.49	2812	2696	2928
Secretarial							1253	1181	1325
Science & engineering							1462	1380	1544
Armed forces							137	111	163
Professional & related supporting management							2203	2100	2306
Cleaners	1151	694	1609	0.26	0.16	0.36	1003	936	1069
Catering							1114	1043	1186
Hair & beauty	24	0	50	0.05	0.00	0.10	180	151	210
Textile processing							331	291	372
All persons	17967	14500	21400	0.65	0.53	0.77	27640	27300	28000

+ *Working population in last 12 months. Average days lost given for groupings of occupations chosen so that the group rates are significantly different (see annex 2 for a full description of how occupations have been grouped).*

Table 89: Cases leading to forced job change in last year by current economic activity status (LAST UPDATED SEPTEMBER 1999)

Current economic activity status	Cases in sample	
	Number	Percentage
With job in last 12 months		
In work or training	32	52
Unemployed:		
temporarily sick	1	2
other	9	15
Long term sick/disabled	13	23
Retired and other inactive (not seeking work)	5	9
Total	60	
No job in last 12 months		
In work or training	30	14
Unemployed:		
temporarily sick	4	2
other	10	5
Long term sick/disabled	100	50
Retired and other inactive (not seeking work)	59	28
Total	203	

Note: Percentages of cases in the sample are based on weighted data

Table 90: Cases leading to forced job change in last year by disease group (LAST UPDATED SEPTEMBER 1999)

Disease	Sample cases		
	Total who worked at some time in last year (a)	Number forced to change job (b)	Percentage (b)/(a)
Individual disease groups (mutually exclusive)			
ULN & LL	9	2	23
Back & ULN & LL or whole body	5	1	22
Trauma	17	3	20
Other lower respiratory disease or unspecified*	18	3	18
Asthma & chronic bronchitis symptoms	9	1	15
Stress, depression or anxiety	145	18	13
Back & ULN	21	3	13
Back & LL	12	1	10
Asthma symptoms only	14	1	10
Skin disease	26	2	9
ALL PERSONS	771	60	8
Back	212	16	8
Stress ascribed diseases of the digestive system	29	1	6
Stress ascribed other conditions	51	3	5
Upper limbs or neck (ULN)	158	9	5
Stress ascribed heart disease, hypertension or stroke	34	2	5
Lower limbs (LL)	34	2	5
Internal	18	1	5
"Other" diseases	27	1	5
Headache or "eyestrain"	26	1	3
Deafness, tinnitus or other ear conditions	32	-	-
Vibration white finger	12	-	-
Pneumoconiosis	-	-	-
Combinations of lower respiratory categories			
Any lower respiratory	41	5	14
Chronic bronchitis symptoms	10	1	14
Asthma symptoms	23	2	12
Combinations of musculoskeletal conditions			
Any musculoskeletal disorders	450	35	8
LL affected	60	6	10
Back affected	249	21	9
ULN affected	193	15	7

Note: Percentages are based on weighted data
A lot of proportions in this table are based on small sample numbers and should be regarded with caution when making comparisons.
* *Includes 2 sample cases reporting chronic bronchitis symptoms*

Table 91: Cases leading to forced job change in last year by occupation group to which illness was ascribed (LAST UPDATED SEPTEMBER 1999)

Occupation groups*	Sample cases		Percentage
	Total who worked at some time in last year (a)	Number forced to change job (b)	(b)/(a)
Armed Forces	3	1	38
Hair & beauty	5	1	23
Textile processing	7	1	21
Nursing	33	7	19
Care workers	41	7	18
Cleaners	24	4	17
Other processing	47	7	16
Construction	40	5	14
Other transport & machinery operatives	6	1	14
Security & protective services (excl. Armed Forces)	16	2	13
Metal processing	41	4	11
ALL PERSONS	771	60	8
Teaching	49	4	7
Farming, fishing & forestry	27	2	7
Professional	49	3	7
Literary, artistic & sports	12	1	6
Catering	16	1	5
Material moving & storing	16	1	5
Clerical	80	4	5
Managerial	67	3	4
Secretarial	26	1	4
Selling	40	-	-
Science & Engineering	30	-	-
Other education & welfare	30	-	-
Road transport operatives	22	-	-
Repetitive assembly, inspection	18	-	-
Electrical processing	14	-	-
Other personal services	6	-	-
Miscellaneous	4	-	-
Coal mining	2	-	-

Note: Percentages are based on weighted data
A lot of proportions in this table are based on small sample numbers and should be regarded with caution when making comparisons.

** If same job caused more than one illness, case only counted once*

(a) current / most recent job for all cases who worked in the last year

(b) occupation that caused the complaint

Table 92: Cases leading to forced job change by disease group (LAST UPDATED SEPTEMBER 1999)

Disease	Sample cases		
	Total	Number forced to change job	Percentage
	(a)	(b)	(b)/(a)
Individual disease groups (mutually exclusive)			
Back & ULN & LL or whole body	27	17	68
Stress ascribed heart disease, hypertension or stroke	63	24	39
Pneumoconiosis	13	4	35
Asthma & chronic bronchitis symptoms	42	14	35
Back & ULN	38	15	34
Asthma symptoms only	40	11	29
Trauma	21	5	26
Stress ascribed other conditions	69	19	26
Back & LL	24	5	25
Back	293	69	24
Stress, depression or anxiety	171	38	23
ALL PERSONS	1188	263	22
Upper limbs or neck (ULN)	225	48	21
"Other" diseases	49	9	20
ULN & LL	21	4	18
Skin disease	35	5	17
Other lower respiratory disease or unspecified*	31	4	14
Stress ascribed diseases of the digestive system	33	3	11
Lower limbs (LL)	58	7	11
Internal	23	2	9
Vibration white finger	19	1	6
Deafness, tinnitus or other ear conditions	99	5	5
Headache or "eyestrain"	30	1	3
Combinations of lower respiratory categories			
Any lower respiratory	113	29	27
Chronic bronchitis symptoms	44	14	34
Asthma symptoms	82	25	32
Combinations of musculoskeletal conditions			
Any musculoskeletal disorders	679	161	24
Back affected	372	99	27
ULN affected	302	80	26
LL affected	124	28	23

Note: Percentages are based on weighted data
Some proportions in this table are based on small sample numbers and should be regarded with caution when making comparisons.

* *Includes 2 sample cases reporting chronic bronchitis symptoms*

Table 93: Cases leading to forced job change by occupation group to which illness was ascribed (LAST UPDATED SEPTEMBER 1999)

Occupation groups*	Sample cases		Percentage
	Total	Number forced to change job	
	(a)	(b)	(b)/(a)
Nursing	63	26	40
Security & protective services (excl. Armed Forces)	21	7	35
Road transport operatives	38	13	34
Care workers	54	17	33
Cleaners	37	12	32
Textile processing	25	7	29
Other processing	92	24	28
Literary, artistic & sport	17	5	27
Construction	69	17	26
Coal mining	33	8	22
Teaching	60	14	22
ALL PERSONS+	1188	263	22
Catering	21	5	21
Material moving & storing	28	6	20
Miscellaneous	10	2	20
Metal processing	100	19	20
Farming, fishing & forestry	35	7	19
Repetitive assembly, inspection	31	6	18
Armed Forces	26	5	18
Clerical	93	17	18
Professional	58	9	17
Managerial	87	13	16
Other transport & machinery operatives	13	2	15
Hair & beauty	7	1	15
Other personal services	6	1	14
Secretarial	39	5	14
Other education & welfare	30	4	14
Electrical processing	27	3	11
Selling	47	3	6
Science & engineering	37	2	5

Note: Percentages are based on weighted data
Some proportions in this table are based on small sample numbers and should be regarded with caution when making comparisons.

* *If same job caused more than one illness, case only counted once*

\+ *Includes cases whose occupational group is missing*

Table 94: Estimated annual number of days that daily activities were limited due to a work-related illness, by disease category

Disease group	Days limited activity (millions)			Average days limited activity per case+		
		95% C.I.			95% C.I.	
	central	lower	upper	central	lower	upper
Stress, depression or anxiety	33	25	41	117	94	140
Stress ascribed heart disease, hypertension or stroke	16	10	23	159	113	205
Stress ascribed diseases of the digestive system	5	2	9	97	43	152
Stress ascribed other conditions	12	7	17	105	69	141
Headache or "eyestrain"	*3*	*1*	*4*	*51*	*15*	*86*
Deafness, tinnitus or other ear conditions	13	7	18	74	44	104
Vibration white finger	*4*	*1*	*7*	*111*	*39*	*183*
Asthma symptoms only	11	6	16	157	103	211
Asthma & chronic bronchitis symptoms	20	13	28	254	203	304
Other lower respiratory disease* or unspecified	5	2	9	101	47	156
Pneumoconiosis	*6*	*2*	*9*	*296*	*225*	*368*
Skin disease	4	1	8	67	27	108
Back	87	73	101	171	152	190
Upper limbs or neck (ULN)	*56*	*45*	*67*	*149*	*127*	*171*
Lower limbs (LL)	20	14	27	204	159	248
Back & ULN	14	8	19	210	154	267
Back & LL	*8*	*4*	*13*	*197*	*129*	*266*
ULN & LL	*9*	*4*	*14*	*241*	*169*	*313*
Back & ULN & LL or whole body	*13*	*7*	*18*	*294*	*250*	*337*
Internal	*3*	*1*	*5*	*76*	*25*	*128*
Trauma	*5*	*2*	*8*	*135*	*66*	*204*
"Other" diseases	10	5	14	118	73	162
All illnesses	319	292	347	158	148	168

continued

Table 94 continued

Disease group	Days limited activity (per million)			Average days limited activity per case+		
		95% C.I.			95% C.I.	
	central	lower	upper	central	lower	upper
Combinations of respiratory categories						
Any lower respiratory	37	27	46	181	148	214
Chronic bronchitis symptoms	21	13	28	248	198	299
Asthma symptoms	31	22	41	208	169	246
Combinations of musculoskeletal conditions						
Any musculoskeletal disorders	203	181	225	176	163	189
Back affected	117	101	134	182	165	200
LL affected	48	37	58	224	194	254
ULN affected	87	73	101	172	152	192

Note: Figures in italics are estimates based on 30 or fewer sample cases.

* *Disease group includes 2 sample cases with chronic bronchitis symptoms*

\+ *"Case" refers to person suffering from a particular work -related illness*

Table 95: Awareness of illness by people in charge at work

Disease	Sample cases	People in charge aware of illness	People in charge accept illness is work-related
		%	%
Stress, depression or anxiety	171	70	42
Stress ascribed heart disease, hypertension or stroke	63	70	43
Stress ascribed diseases of the digestive system	33	77	35
Stress ascribed other conditions	70	69	35
Headache or "eyestrain"	30	*77*	*52*
Deafness, tinnitus or other ear conditions	99	54	40
Vibration white finger	19	*60*	*43*
Asthma symptoms only	40	65	30
Asthma & chronic bronchitis symptoms	42	45	26
Other lower respiratory disease* or unspecified	31	54	11
Pneumoconiosis	13	*50*	*43*
Skin disease	35	69	48
Back	293	68	38
Upper limbs or neck (ULN)	232	66	34
Lower limbs (LL)	58	49	27
Back & ULN	38	53	24
Back & LL	24	*48*	*33*
ULN & LL	21	*33*	*13*
Back & ULN & LL or whole body	27	*49*	*21*
Internal	23	*56*	*47*
Trauma	23	*69*	*66*
"Other" diseases	49	77	42
All illnesses	1434	64	37
Combinations of lower respiratory categories			
Any lower respiratory disease	113	54	24
Asthma symptoms	82	54	28
Chronic bronchitis symptoms	44	43	25
Combinations of musculoskeletal conditions			
Musculoskeletal disorders	716	62	39
ULN	311	61	31
Back	377	64	36
LL	124	47	26

Note: Figures in italics are estimates based on 30 or fewer sample cases

* *Includes cases reporting Chronic bronchitis symptoms*

Table 96: Individuals awareness of health risks

Disease group	Sample cases	Aware that health could have been affected %	Other people at work are affected in same way %
Stress, depression or anxiety	171	18	65
Stress ascribed heart disease, hypertension or stroke	63	14	40
Stress ascribed diseases of the digestive system	33	12	61
Stress ascribed other conditions	70	12	34
Headache or "eyestrain"	30	*14*	*53*
Deafness, tinnitus or other ear conditions	99	13	63
Vibration white finger	19	*9*	*74*
Asthma symptoms only	40	23	43
Asthma & chronic bronchitis symptoms	42	17	43
Other lower respiratory disease* or unspecified	31	24	35
Pneumoconiosis	13	*17*	*77*
Skin disease	35	16	54
Back	293	26	52
Upper limbs or neck (ULN)	232	10	39
Lower limbs (LL)	58	9	29
Back & ULN	38	22	42
Back & LL	24	*13*	*38*
ULN & LL	21	*13*	*33*

continued

Table 96 continued

Disease group	Sample cases	Aware that health could have been affected %	Other people at work are affected in same way %
Back & ULN & LL or whole body	27	*27*	*37*
Internal	23	*16*	*22*
Trauma	23	*31*	*52*
"Other" diseases	49	12	33
All illnesses	1434	17	47
Combinations of respiratory categories			
Any lower respiratory disease	113	21	41
Asthma symptoms	82	20	44
Chronic bronchitis symptoms	44	17	43
Combinations of musculoskeletal conditions			
Musculoskeletal disorders	716	18	42
ULN affected	311	12	38
Back affected	377	24	49
LL affected	124	13	32

Note Figures in italics are estimates based on 30 or fewer sample cases

Percentages are based on weighted data

* *Includes cases reporting chronic bronchitis symptoms*

Table 97: Changes people in charge could have made to reduce health risks

Disease	Sample cases	Changes made at work since the illness started %	Further changes that could have been made %
Stress, depression or anxiety	171	22	69
Stress ascribed heart disease, hypertension or stroke	63	23	50
Stress ascribed diseases of the digestive system	33	24	58
Stress ascribed other conditions	70	14	43
Headache or "eyestrain"	30	*41*	*40*
Deafness, tinnitus & other ear conditions	99	66	49
Vibration white finger	19	*43*	*25*
Asthma symptoms only	40	29	32
Asthma & chronic bronchitis symptoms	42	34	44
Other lower respiratory disease* or unspecified	31	43	47
Pneumoconiosis	13	*52*	*27*
Skin disease	35	43	52
Back	293	33	34
Upper limbs or neck (ULN)	232	32	34
Lower limbs (LL)	58	19	15
Back & ULN	38	28	31
Back & LL	24	*24*	*37*
ULN & LL	21	*27*	*24*

continued

Table 97 continued

Disease	Sample cases	Changes made at work since the illness started %	Further changes that could have been made %
Back & ULN & LL or whole body	27	*24*	*25*
Internal	23	*25*	*26*
Trauma	23	*33*	*47*
"Other" diseases	49	17	36
All illnesses	1434	31	41
Combinations of lower respiratory categories			
Any lower respiratory disease	113	35	41
Asthma symptoms	82	32	38
Chronic bronchitis symptoms	44	36	44
Combinations of musculoskeletal conditions			
Musculoskeletal disorders	716	30	31
ULN affected	311	30	32
Back affected	377	31	33
LL affected	124	22	23

Note: Figures in italics are estimates based on 30 or fewer sample cases

Percentages based on weighted data

* *Includes Chronic bronchitis symptoms*

Table 98: Changes people in charge could have made to reduce risks

Description of changes	Sample numbers	Changes made at work since illness started %	Sample numbers	Further changes that could have been made %
Changes to the workplace layout, tools or equipment	115	24	128	23
Better individual protection	64	14	54	9
More information provided about the risk	63	14	57	10
Changes in the way the work is done	60	13	150	26
Other	50	11	111	19
Work place closed down	38	9	-	-
More or better training on avoiding the risk	37	8	35	6
Better control of materials or substances used	*16*	*4*	*22*	*4*
Medical checks/support	*9*	*2*	*14*	*2*
Change of materials or substances used	*5*	*1*	*12*	*2*

Note: Figures in italics are estimates based on 30 or fewer sample cases
Percentages are based on weighted data

Table 99: Changes the individual could have made to prevent the illness

Disease	Sample cases	Percentage of cases that could have made changes
		%
Stress, depression or anxiety	171	63
Stress ascribed diseases of the digestive system	33	55
Headache or "eyestrain"	30	*49*
Skin disease	31	48
Other lower respiratory disease* or unspecified	35	47
Stress ascribed heart disease, hypertension or stroke	70	42
Stress ascribed other conditions	63	41
Back	293	39
Asthma symptoms only	40	38
"Other" diseases	23	*37*
Trauma	38	33
Back & ULN	49	32
Back, ULN, LL or whole body	27	*32*
Upper limbs or neck (ULN)	232	32
Asthma & chronic bronchitis symptoms	58	28
Deafness, tinnitus or other ear conditions	42	27
Back & LL	24	*24*
Lower limbs (LL)	99	24
ULN & LL	21	*21*
Internal	23	*21*
Vibration white finger	19	*18*
Pneumoconiosis	13	*14*
All illnesses	1434	38
Combinations of respiratory categories		
Any lower respiratory disease	113	36
Asthma	82	32
Chronic bronchitis	44	30
Combinations of musculoskeletal conditions		
Musculoskeletal disorders	716	33
ULN affected	311	31
Back affected	377	37
LL affected	124	27

Note: Figures in italics are estimates based on 30 or fewer sample cases

Percentages are based on weighted data

* *Includes Chronic bronchitis symptoms*

Table 100: Changes the individual could have made to prevent the illness

Description of changes	Sample cases	Changes that could have been made by the respondent
		%
Find alternative employment	113	21
Reduce work load, distance self from job	113	20
Change working patterns (eg use keyboard less)	56	10
Ask for different equipment (eg wrist rest, ventilation)	53	9
Follow Health and Safety recommendations	36	7
Ask for more information or training	32	6
Change diet	11	2
Give up smoking	2	0
Other	131	24

Note: Percentages are based on weighted data

APPENDIX 1

LFS SCREENING QUESTIONS

APPENDIX 1

LFS SCREENING QUESTIONS : SELF-REPORTED WORK-RELATED ILLNESS

ILLWORK1 - 5th wave only

APPLIES TO ALL AGED 16 AND OVER AND EMPLOYED IN LFS REFERENCE WEEK OR HAS EVER HAD A JOB IDENTIFIED BY LFS

In the past 12 months, have you (has.....) suffered from any illness, disability or other physical problem that was caused or made worse by your([Reltxt] [Name]) work?

Please include any work you ([RelTxt][Name]) have (has) done in the past.

Yes	1
No	2
Don't know	3

The 'don't know' category will only be used where the interview has been a proxy.

TYPEILL

APPLIES IF ILLWORK1=1

How would you describe this illness or those illnesses?

CODE ALL THAT APPLY

Bone, joint or muscle problem?	1
Breathing or lung problem?	2
Hearing problem.?	3
Skin problem?	4
Stress, depression or anxiety?	5
Other problem?	6

NEWQSIK

APPLIES IF ILLWORK1 = 1 OR 3

Would you (Do you think [RelTxt][Name] would) be prepared to answer some further questions about your (his/her) illness (es) caused or made worse by work at another time?

Yes.....1
No.....2
Don't Know.....3

The don't know category will only be used where the interview has been a proxy.

APPENDIX 2

Office of Population Censuses and Surveys

SOCIAL SURVEY DIVISION

Survey of Work-Related Illness

Mainstage

Questionnaire

31 October 1995

1. ILLCHK APPLIES TO ALL AGED 16 AND OVER WHO ANSWERED POSITIVELY TO SCREENING QUESTIONS ON THE AUTUMN / SUMMER QUARTERS OF THE LFS

When your household was last interviewed on the LFS on (insert the LFS interview date) you/the person we spoke to told us that you had suffered from some illness, disability or other physical problem caused or made worse by your work.

CODE 1 TO CONTINUE

2. ILLWORK1 APPLIES IF ILLCHK =1

May I just check the answers you (your friend / relative) gave on (insert LFS interview date). You (you friend / relative) were/was asked whether in the previous 12 months, that is between (insert date 12 months prior to LFS interview) and (insert LFS interview date), you had suffered from some illness, disability or physical problem caused or made worse by your work. You (your friend / relative) indicated (thought) that you had suffered from such an illness. Is this correct?

Work-related illness 1
No work-related illness.....2

3. WHYNO APPLIES IF ILLWORK1 =2

INTERVIEWER CODE

PLEASE PROBE AND RECORD WHY INCORRECT REPORTING OF WORK-RELATED ILLNESS MIGHT HAVE ARISEN THEN END INTERVIEW

4. a-e. APPLIES IF (ILLWork1 =Yes)
TABLE (for entering illnesses)

The table contains the following:

4a. ILLNo
Enter illness number

4b. ILLTxt

What is/was your illness?
Enter short name for illness

4c. DescIll

In a few words, how would you describe the illness or physical problem that was caused or made worse by your work?

4d. TypeIll

ASK OR RECORD IF CLEAR FROM PREVIOUS RESPONSES

And may I just check, how would you describe this illness?

CODE MOST APPLICABLE

Bone, joint or muscle problem	1
Breathing or lung problem	2
Hearing problem	3
Skin problem	4
Stress, depression or anxiety	5
Other problem	6

4e. MoreIll

ASK OR RECORD

Did you suffer from any more work-related illnesses during this period?

Yes	1
No	2

5. More4 APPLIES IF ILLWork1 =Yes

RECORD BRIEF DETAILS OF FURTHER ILLNESSES

6. LFSWRI APPLIES IF ILLWork1 =Yes

UP TO NOW, THE INFORMANT HAS MENTIONED THAT THEY SUFFER(ED) FROM //
(insert up to 4 typeill from table)
AT THE LFS SCREEN, THE FOLLOWING TYPES OF ILLNESS WERE RECORDED:
(insert up to 4 typeill from LFS data)
HAVE ALL LFS ILLNESSES BEEN ACCOUNTED FOR?

Yes	1
No	2

7. LFSDiff APPLIED IF LFSWRI =YES

PROBE FOR ILLNESS AND IF RESPONDENT STATES THAT THEY DO/DID NOT SUFFER FROM ANY REMAINING LFS ILLNESSES
PLEASE MAKE NOTE OF POSSIBLE REASON FOR DIFFERENCE IN REPORTING

8. MostSer APPLIES IF (ILLWork1 =Yes) and MoreIll =1 for line1 of table (ie. respondent has got more than 1 illness)
[*]

You have told me that you suffer from (insert ILLTxt responses).
Which do you consider to be the most serious?

(insert ILLTxt1)	1
(insert ILLTxt2)	2
(insert ILLTxt3)	3
(insert ILLTxt4)	4

Ask each question (**9-129**) for each separate complaint - (up to 4) - in table.

9. Intst1 APPLIES If (IllWork1 =Yes)

INTERVIEWER STATEMENT

I would like to ask you about your (insert IllTxt)

10. Consult APPLIES IF IllWork1 =Yes

Have you consulted a doctor about your (insert IllTxt)?

Yes	1
No	2

11. Matter APPLIES IF IllWork1 =Yes and Consult =1

Do you know or remember what the doctor said was the matter with you?

Yes	1
No	2

12. DiagIll APPLIES IF IllWork1 =1 and Matter =1

RECORD DIAGNOSIS

13. Affnow APPLIES IF IllWork1 =Yes

Are you still affected by your (insert Illtxt)?

Yes	1
No	2
Not sure - SPONTANEOUS ONLY	3

14. Cause APPLIES IF IllWork1 =Yes

Was your (insert Illtxt) problem caused by your work or did your work simply make it worse?

Work caused it 1
Work made it worse 2

15. HowCause APPLIES IF IllWork1=Yes

Can you describe in a few words how your work caused your (insert Illtxt) / made your (insert Illtxt) worse?

16. StressCa APPLIES IF IllWork1 =Yes and TypeIll = 1, 2, 3, 4, 6

INTERVIEWER CODE

DID THE RESPONDENT DESCRIBE STRESS AT WORK AS CAUSING OR MAKING THE COMPLAINT WORSE?

Yes 1
No 2

17. Accident APPLIES IF ILLWork1=Yes

ASK OR CODE IF CLEAR FROM RESPONSE
Was your (insert Illtxt) (insert caused / made worse) by an accident at work?

Yes 1
No 2

18. AccYr APPLIES IF IllWork1 =Yes and Accident =1

In which year was this accident?

19. AccMon APPLIES IF IllWork1 =Yes and Accident =1 and AccYr =1992-1995

And which month was that?

20. Substan APPLIES IF IllWork1 =Yes And TypeIll =2, 4 or 6

ASK OR RECORD IF CLEAR FROM RESPONSE TO HowCause

May I just check, was your (insert Illtxt) caused by a substance used or present in the workplace?

Yes 1
No 2

21. WhatSub APPLIES IF IllWork1 =Yes and Substan =1

What was this substance (or substances)?

TRY TO GET AS PRECISE A DEFINITION AS POSSIBLE

22. TaskLed APPLIES IF IllWork1 =Yes and TypeIll =1

ASK OR CODE IF CLEAR FROM PREVIOUS RESPONSES

May I just check, is there a particular task, or set of tasks, that you have (had) to do at work which has led to your (insert Illtxt)?

Yes	1
No	2
Don't know	3

23. TaskDone APPLIES IF IllWork1 =Yes and TaskLed =1

INTERVIEWER CODE
HAVE TASKS ALREADY BEEN DESCRIBED?

Yes	1
No	2

24. TaskDesc APPLIES IF IllWork1 =Yes and TaskDone =2

Please could you describe these tasks in a few words

25. TaskRep APPLIES IF IllWork1 =Yes and TaskLed =1

Do/did these tasks involve repeating the same sequence of movements many times?

Yes	1
No	2
Don't know	3

26. TaskPos APPLIES IF IllWork1 =Yes and TaskLed =1

... working in awkward or tiring positions?

Yes	1
No	2
Don't know	3

27. TaskFast APPLIES IF IllWork1 =Yes and TaskLed =1

... working very fast?

Yes	1
No	2
Don't know	3

28. TaskFrce APPLIES IF IllWork1 =Yes and TaskLed =1

... using appreciable force?

Yes	1
No	2
Don't know	3

29. TaskLoad APPLIES IF IllWork1 =Yes and TaskLed=1

... lifting or moving heavy loads?

Yes	1
No	2
Don't know	3

30. TaskTwst APPLIES IF IllWork1 =Yes and TaskLed =1 and TaskLoad =1

Does / did the lifting or moving of heavy loads involve twisting or stooping?

Yes	1
No	2
Don't know	3

31. TaskFTh APPLIES IF IllWork1 =Yes and TaskLed =1

(Do / Did these tasks involve) repeated gripping and releasing or pinching between finger and thumb?

Yes	1
No	2
Don't know	3

32. TaskFPlm APPLIES IF IllWork1 =Yes and TaskLed =1

... repeated gripping and releasing between fingers and palm?

Yes	1
No	2
Don't know	3

33. TaskThmb APPLIES IF IllWork1 =Yes and TaskLed =1

... maintaining a fixed bent thumb position?

Yes	1
No	2
Don't know	3

34. TaskWrst APPLIES IF IllWork1 =Yes and TaskLed =1

... bending the wrist a lot?

Yes	1
No	2
Don't know	3

35. TaskLift APPLIES IF IllWork1 =Yes and TaskLed =1

... working with your hands at or above shoulder height?

Yes	1
No	2
Don't know	3

36. TaskKnee APPLIES IF IllWork1 =Yes and TaskLed =1

... kneeling?

Yes	1
No	2
Don't know	3

37. TaskBend APPLIES IF IllWork1 =Yes and TaskLed =1

... leaning forward from the waist?

Yes	1
No	2
Don't know	3

38. PartBody APPLIES IF IllWork1 =Yes and TypeIll =1

May I just check, what part of your body is / was affected by your (insert Illtxt)?

CODE ALL THAT APPLY

Digit	1
Hand	2
Wrist	3
Forearm	4
Elbow	5
Upper arm	6
Shoulder	7
Head (above neck)	8
Neck	9
Upper Back (below neck but above waist)	10
Lower Back (including waist)	11
Hip	12
Thigh	13
Knee	14
Calf	15
Ankle	16
Foot	17
Internal (eg, ribs, chest, hernia)	18
Whole body	19

39. ULDSymp APPLIES IF IllWork1 =Yes and PartBody = 1 to 9

Do / did you suffer from any of the following symptoms?

CODE ALL THAT APPLY

Aches and pains?	1
Swelling?	2
Tenderness?	3
Loss of strength?	4
Limitation of movement?	5
Numbness or tingling (pins and needles)?	6
None of these - INTERVIEWER CODE	7

40. CodeVWF APPLIES IF IllWork1 =Yes

INTERVIEWER CODE
WAS THE PROBLEM VIBRATION WHITE FINGER, DEAD HAND OR RAYNAUD'S DISEASE?

Yes	1
No	2

41. VWFHand APPLIES IF IllWork1 =Yes and CodeVWF =1

Between attacks of your (insert Illtxt) do you have any difficulty picking up or handling small objects?

Yes	1
No	2

42. WhichJob APPLIES IF IllWork1 =Yes

May I just check, what job it was that affected your (insert Illtxt)?

(main or previous job & industry title from LFS)	1
(second job & industry title from LFS)	2
(3 months ago job & industry title from LFS)	3
(job coded from illness 1)	4
(job coded from illness 2)	5
(job coded from illness 3)	6
None of these	7

43. WIndD APPLIES IF IllWork1 =Yes and WhichJob =7 or (WhichJob =1 and left LFS job more than 8 years ago)

What did the firm / organisation you worked for mainly make or do (at the place where you worked)?

DESCRIBE FULLY PROBE MANUFACTURING OR PROCESSING, OR DISTRIBUTING ETC. AND MAIN GOODS PRODUCED, MATERIALS USED, WHOLESALE OR RETAIL ETC.

44. WIndT APPLIES IF IllWork1 =Yes and WhichJob =7 or (WhichJob =1 and left LFS job more than 8 years ago)

Enter a short title for the industry

45. WOccT APPLIES IF IllWork1 =Yes and WhichJob =7 or (WhichJob =1 and left LFS job more than 8 years ago)

What was your job?

ENTER JOB TITLE

46. WOccD APPLIES IF IllWork1 =Yes and WhichJob =7 or (WhichJob =1 and left LFS job more than 8 years ago)

What did you mainly do in your job?

CHECK SPECIAL QUALIFICATIONS / TRAINING NEEDED TO DO THE JOB

47. WStat APPLIES IF IllWork1 =Yes and WhichJob = 2, 3, 7 or (WhichJob =1 and left LFS job more than 8 years ago)

Were you working as an employee or were you self-employed?

Employee	1
Self-employed	2
Government scheme	3
Unpaid family worker	4

48. WConYr APPLIES IF IllWork1 =Yes and WhichJob = 2, 3, 7 and WStat =Response or (WhichJob =1 and not currently working)

In which year did you start working continuously in this job?

49. WConMon APPLIES IF IllWork1 =Yes and WConYr within 8 years of current

And which month was that?

50. NowEmp APPLIES IF IllWork1 =Yes and WhichJob = 1, 2, 3, 7

ASK OR RECORD
(May I just check) Are you still in this job?

Yes	1
No	2

51. WLeftYr APPLIES IF IllWork1 =Yes and NowEmp =2 and WhichJob = 1,2,3,7

In which year did you leave this job?

52. WLeftM APPLIES IF IllWork1 =Yes and WLeftYr within 8 years of current

And which month was that?

53. WYLeft APPLIES IF IllWork1 =Yes and NowEmp =2 and WhichJob= 1,2,3,7

Could you tell me why you left that job?

PROMPT AS NECESSARY

you were made redundant	1
you were dismissed	2
it was a temporary job which came to an end	3
you resigned	4
you took early retirement under the Job Release Scheme	5
you gave up work because of your (insert Illtxt) - SPONTANEOUS	6
you gave up work because of your (insert Illtxt) - PROBED	7
you gave up work for other health reasons	8
you retired	9
you gave up work for family or personal reasons	10
you left for some other reason	11

54. AwareYr APPLIES IF IllWork1 =Yes

In which year were you first aware of your (insert Illtxt)?

55. AwareMon APPLIES IF IllWork1 =Yes and AwareYr =1992-1996

And which month was that?

56. TimeIll APPLIES IF IllWork1 =Yes and illness not caused / made worse by accident in last 12 months

Which of the following best describes your (insert Illtxt) problem?

I had a single period of illness which completely cleared up?	1
I have had several periods of illness but I was completely fit in between?	2
The illness does not affect me all of the time, but I am now more likely to become ill in this way ?	3
The illness affects me to some extent all of the time ?	4

57. BetterWk APPLIES IF IllWork1 =Yes and illness not caused / made worse by accident in last 12 months

Is / was your (insert Illtxt) better when you are / were away from work for a couple of days, for example at weekends?

Yes	1
No	2
Don't know	3

58. BetWeek APPLIES IF IllWork1 =Yes and BetterWk = 2 or 3

Is / was your (insert Illtxt) better when you are / were away from work for a week or more?

Yes	1
No	2
Don't know	3

59. WhoTreat APPLIES IF IllWork1 =Yes

Is / was your (insert Illtxt) being treated by:

CODE ALL THAT APPLY

Your GP?	1
A hospital doctor?	2
Your works doctor?	3
A nurse?	4
Someone else	5
Awaiting treatment	6
No one	7

60. TreaElse APPLIES IF IllWork1 =Yes and WhoTreat =5

Who else is / was treating your (insert Illtxt)?

A physiotherapist	1
A psychologist or psychotherapist	2
A counsellor	3
An alternative practitioner	4
Someone else	5

61. GPKnow APPLIES IF WhoTreat NE 1

Is / was your GP aware of your (insert Illtxt) ?

Yes	1
No	2
Not sure / Don't know	3

62. TreaYr APPLIES IF IllWork1 =Yes and WhoTreat NE 7

In which year did you first seek treatment for your (insert IllTxt) ?

63. TreaMon APPLIES IF IllWork1 =Yes and WhoTreat NE 7 and TreaYr = 1992-95

And which month was that?

64. TypeTrea APPLIES IF IllWork1 =1

What kinds of treatment have you had, including rest and change of work?

CODE ALL THAT APPLY

Rest (include temporary change of work - same employer)	1
Permanent change of work - same employer	2
Change of work - different employer	3
Medicines (taken internally or inhaled)	4
Ointments, creams or rubs	5
Physical support eg bandage, corset, splint	6
Exercises, physiotherapy	7
Massage	8
Heat and/or ice	9
Changed diet	10
Surgery	11
Counselling, psychotherapy	12
Ultrasound	13
Acupuncture	14
Relaxation (including breathing exercises)	15
Awaiting treatment	16
None of these	17

65. LongRest APPLIES IF IllWork1 =Yes and TypeTrea =1

How long was the rest?

66. LongTime APPLIES IF IllWork1 =Yes and TypeTrea =1

INTERVIEWER CODE
WAS THE LENGTH OF THIS REST RECORDED IN ...

Days	1
Working (5-day) weeks	2
Calendar (7-day) weeks	3
Calendar months	4
Years	5

67. HelpRest APPLIES IF IllWork1 =Yes and TypeTrea =1

How helpful was the rest?
[*]

Very helpful	1
Helpful	2
Not helpful	3
Made problem worse	4
Too soon to say	5
Not sure/Don't know	6

68. HelpChS APPLIES IF IllWork1 =Yes and TypeTrea =2

How helpful was the change of work - same employer?
[*]

Very helpful	1
Helpful	2
Not helpful	3
Made problem worse	4
Too soon to say	5
Not sure/Don't know	6

69. HelpChD APPLIES IF IllWork1 =Yes and TypeTrea =3

How helpful was the change of work - different employer?
[*]

Very helpful	1
Helpful	2
Not helpful	3
Made problem worse	4
Too soon to say	5
Not sure/Don't know	6

70. OffWork APPLIES IF IllWork1 =Yes and been in work in 12 months prior to LFS screen (as denoted by LFS Variables Scheme, Wrking, JbAway, OwnBus, RelBus, EverWk, LeftYr and LeftMon)

In the 12 months prior to your last LFS interview, that is between (Insert date 12 months before LFS screen) and (Insert LFIntDat), did you take any time off work because of your
(insert Illtxt)?

Yes	1
No	2

71. DaysOff APPLIES IF Illwork1=Yes and OffWork=1

In total, in the 12 months prior to your last LFS interview, that is in the 12 months before (Insert LFIntDat), how much time did you take off work because of your (insert Illtxt)?

record number (1 to 365)

72. LongOff APPLIES IF Illwork1=Yes and OffWork=1 and DaysOff=Response

INTERVIEWER CODE
WAS THE LENGTH OF TIME OFF WORK RECORDED IN ....

Days	1
Working (5-day) weeks	2
Calendar (7-day) weeks	3
Calendar months	4
Years	5

73. RestAct APPLIES IF IllWork1=Yes

In the 12 months prior to your last LFS interview, that is in the 12 months prior to (insert LFIntDat), did your (insert Illtxt) limit your daily activities?

Yes	1
No	2

74. RATime APPLIES IF IllWork1=Yes and RestAct=1

For how long were your daily activities limited (including days off work)?

record number (1 to 365)

75. LongRAT APPLIES IF IllWork1=Yes and Restact=1 and RATime=Response

INTERVIEWER CODE
WAS THE LENGTH OF TIME OFF WORK RECORDED IN ....

Days 1
Working (5-day) weeks 2
Calendar (7-day) weeks 3
Calendar months 4
Years 5

76. ElseAff APPLIES IF IllWork1=Yes and illness not caused / made worse by accident in last 12 months

Has/was anyone else at your place of work (been) affected in the same way?

Yes 1
No 2
Don't know 3

77. BossKnow APPLIES IF IllWork1=Yes and (WStat=1 3 or 4 or LFS Stat=1 3 or 4) and illness not caused/made worse by accident in last 12 months

Do/did the people in charge at work (at the time) know that you think your work caused your (insert Illtxt)/ made your (insert Illtxt) worse?

Yes 1
No 2
Can't recall /Don't know 3

78. BossTold APPLIES IF IllWork1=Yes and BossKnow=2 or 3

ASK OR RECORD IF CLEAR FROM RESPONSE TO BOSSKNOW

Was anyone in charge at work told about your (insert Illtxt)?

Yes 1
No 2
Can't recall /Don't know 3

79. BossAx APPLIES IF IllWork1=Yes and (BossKnow=1 or BossTold=1)

ASK OR RECORD IF CLEAR FROM PREVIOUS RESPONSES

Do you think that the people in charge at work (at the time) accept/accepted that your (insert Illtxt) is a work-related problem?

Yes	1
No	2
Don't know	3

80. KnowProb APPLIES IF IllWork1=Yes and illness not caused/made worse by accident in last 12 months

Did you know that your health might be affected in this way before it happened?

Yes	1
No	2

81. Change APPLIES IF IllWork1=Yes

Have any changes been made at you work since you had your (insert Illtxt) to reduce the risks of people being affected in this way?

Yes	1
No	2
Don't know	3

82. WhatCh APPLIES IF IllWork1=Yes and Change=1

What was this change (changes)?

CODE ALL THAT APPLY

More information provided about the risk	1
More or better training on avoiding risk	2
Changes to workplace layout, tools or equipment	3
Change of materials or substances used	4
Better control of materials or substances used (eg automation, enclosure, extraction fans)	5
Better individual protection (eg gloves, masks, earplugs)	6
Changes in the way the work is done (eg job rotation, more frequent breaks, smaller loads, automation)	7
Medical checks /support (eg, counsellor)	8
Work place closed down	9
Other	10

83. ChanOth APPLIES IF IllWork1=Yes and WhatCh=10

What was this other change?

84. CldChan APPLIES IF IllWork1=Yes and (WStat=1 3 or 4 or LFS Stat=1 3 or 4)

Are there (other) things that the people in charge at work could have done that would have helped prevent your (insert Illtxt)?

Yes	1
No	2
Don't know	3

85. CldOth APPLIES IF IllWork1=Yes and CldChan=1

What are these other things?

CODE ALL THAT APPLY

More information provided about the risk	1
More or better training on avoiding risk	2
Changes to workplace layout, tools or equipment	3
Change of materials or substances used	4
Better control of materials or substances used (eg automation, enclosure, extraction fans)	5
Better individual protection (eg gloves, masks, earplugs)	6
Changes in the way the work is done (eg job rotation, more frequent breaks, smaller loads, automation)	7
Medical checks /support (eg, counsellor)	8
Other	9

86. YouChan APPLIES IF IllWork1=Yes

Are there things that you could have done that would have helped prevent your (insert Illtxt)?

Yes	1
No	2
Don't know	3

87. YouOth APPLIES IF IllWork1=Yes and YouChan=1

What are these other things?

Ask for more information or training 1
Ask for different equipment (eg wrist rest, ventilation) 2
Follow Health and Safety recommendations 3
Change working patterns (eg use keyboard less) 4
Reduce work load, distance self from job 5
Find alternative employment 6
Give up smoking 7
Change diet 8
Other 9

88. Intst2 APPLIES IF IllWork1=Yes and WhichJob=1 2 3 or 7 (NB only asked of first illness if same job caused other illnesses. bit in [] only if TaskLed=1)

INTERVIEWER STATEMENT READ OUT

I would like to ask you some questions about different aspects of the work that led to your (insert IllTxt). [Some of these questions repeat things I have already asked about the particular tasks which caused your problem/made your problem worse. Now I want to know how they apply to your job as a whole.] Each question asks whether some description applies to your work, and if it does, how often.

CODE 1 TO CONTINUE

89. TooMuch APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=1,2,4,5,6 or StressCa=Yes)

Do/did you ever feel you have/had too much work to do?

Yes 1
No 2

90. OftMuch APPLIES IF IllWork1=Yes and TooMuch=1

How often does/did this happen?

Always/almost always 1
About three quarters of the time 2
About half of the time 3
About a quarter of the time 4
Less often 5

91. TooLit APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=1,2,4,5,6 or StressCa=Yes)

Do/did you ever feel you have/had too little work to do?

Yes 1
No 2

92. OftLit APPLIES IF IllWork1=Yes and TooLit=1

How often does/did this happen?

Always/almost always 1
About three quarters of the time 2
About half of the time 3
About a quarter of the time 4
Less often 5

93. RepSeq APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=1,2,4,5,6 or StressCa=Yes) and (TaskRep ne 1)

Does/did your job involve repeating the same sequence of movements many times?

Yes 1
No 2

94. OftRep APPLIES IF IllWork1=Yes and (RepSeq=1 or TaskRep=1) bit in [] only if TaskRep=1

[You mentioned earlier that certain task(s) in your job involve(d) repeating the same sequence of movements many times, now thinking about your job as a whole,] how often does/did this happen?

Always/almost always 1
About three quarters of the time 2
About half of the time 3
About a quarter of the time 4
Less often 5

95. Awkward APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=1,5,6 or StressCa=Yes or CodeVWF=Yes) and (TaskPos ne 1)

Does/did your job ever involve working in painful or tiring positions?

Yes 1
No 2

96. OftAwk APPLIES IF IllWork1=Yes and (Awkward=1 or TaskPos=1) bit in [] only if TaskPos=1

[You mentioned earlier that certain task(s) in your job involve(d) working in awkward or tiring positions, now thinking about your job as a whole,] how often does/did this happen?

Always/almost always 1
About three quarters of the time 2
About half of the time 3
About a quarter of the time 4
Less often 5

97. Speed APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=1,2,4,5,6 or StressCa=Yes or CodeVWF=Yes) and (TaskFast ne 1)

Does/did your job ever involve working very fast?

Yes 1
No 2

98. OftSpeed APPLIES IF IllWork1=Yes and (Speed=1 or TaskFast=1) bit in [] only if TaskFast=1

[You mentioned earlier that certain task(s) in your job involve(d) working very fast, now thinking about your job as a whole,] how often does/did this happen?

Always/almost always 1
About three quarters of the time 2
About half of the time 3
About a quarter of the time 4
Less often 5

99. Deadline APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=1,2,4,5,6 or StressCa=Yes or CodeVWF=Yes)

Does/did your job ever involve working to tight deadlines?

Yes 1
No 2

100. OftDead APPLIES IF IllWork1=Yes and Deadline=1

How often does/did this happen?

Always/almost always 1
About three quarters of the time 2
About half of the time 3
About a quarter of the time 4
Less often 5

101. Force APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=1,4,5,6 or StressCa=Yes or CodeVWF=Yes) and (TaskFrce ne 1)

Does/did your job ever involve using appreciable force?

Yes 1
No 2

102. OftForce APPLIES IF IllWork1=Yes and (Force=1 or TaskFrce=1) bit in [] only if Taskfrce=1

[You mentioned earlier that certain task(s) in your job involve(d) using appreciable force, now thinking about your job as a whole,] how often does/did this happen?

Always/almost always 1
About three quarters of the time 2
About half of the time 3
About a quarter of the time 4
Less often 5

103. Heavy APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=1,5,6 or StressCa=Yes or CodeVWF=Yes) and (TaskLoad ne 1)

Does/did your job ever involve lifting or moving heavy loads?

Yes 1
No 2

104. OftHeavy APPLIES IF IllWork1=Yes and (Heavy=1 or TaskLoad=1) bit in [] only if TaskLoad=1

[You mentioned earlier that certain task(s) in your job involve(d) lifting or moving heavy loads, now thinking about your job as a whole,] how often does/did this happen?

Always/almost always 1
About three quarters of the time 2
About half of the time 3
About a quarter of the time 4
Less often 5

105. Twist APPLIES IF IllWork1=Yes and IntSt2=1 and (Heavy=1 or TaskTwst ne 1)

When your job involves/involved you in lifting or moving heavy loads, does/did this involve twisting or stooping?

Yes 1
No 2

106. OftTwist APPLIES IF IllWork1=Yes and (Twist=1 or TaskTwst=1)

Thinking of the times that your job involves/involved you in lifting or moving heavy loads, how often does/did this involve twisting or stooping?

Always/almost always 1
About three quarters of the time 2
About half of the time 3
About a quarter of the time 4
Less often 5

107. Tools APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=1,3,5,6 or StressCa=Yes or CodeVWF=Yes)

Does/did your job ever involve the use of hand-held power tools which transmit / transmitted vibration into your hands?

Yes 1
No 2

108. OftTools APPLIES IF IllWork1=Yes and Tools=1

How often does/did this happen?

Always/almost always 1
About three quarters of the time 2
About half of the time 3
About a quarter of the time 4
Less often 5

109. Vibrate APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=1,3,5,6 or StressCa=Yes or CodeVWF=Yes)

Does/did your job ever involve you sitting or standing on a vibrating machine or in a vibrating vehicle?

Yes 1
No 2

110. OftVib APPLIES IF IllWork1=Yes and Vibrate=1

How often does/did this happen?

Always/almost always 1
About three quarters of the time 2
About half of the time 3
About a quarter of the time 4
Less often 5

111. HeatCold APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=1,2,4,5,6 or StressCa=Yes or CodeVWF=Yes)

Does/did your job ever expose you to uncomfortable heat or cold?

Yes 1
No 2

112. OftHtCld APPLIES IF IllWork1=Yes and HeatCold=1

How often does/did this happen?

Always/almost always 1
About three quarters of the time 2
About half of the time 3
About a quarter of the time 4
Less often 5

113. Fumes APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=2,5,6 or StressCa=Yes)

Does/did your job ever expose you to breathing fumes, dusts or other harmful substances?

Yes 1
No 2

114. OftFume APPLIES IF IllWork1=Yes and Fumes=1

How often does/did this happen?

Always/almost always 1
About three quarters of the time 2
About half of the time 3
About a quarter of the time 4
Less often 5

115. Touch APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=4,5,6 or StressCa=Yes)

Does/did your job ever require you to handle or touch harmful substances or materials?

Yes 1
No 2

116. OftTouch APPLIES IF IllWork1=Yes and Touch=1

How often does/did this happen?

Always/almost always 1
About three quarters of the time 2
About half of the time 3
About a quarter of the time 4
Less often 5

117. Order APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=1,5,6 or StressCa=Yes)

Can/could you ever choose or change the order of your tasks or your method of working?

Yes 1
No 2

118. OftOrder APPLIES IF IllWork1=Yes and Order=1

How often can/could you do this?

Always/almost always 1
About three quarters of the time 2
About half of the time 3
About a quarter of the time 4
Less often 5

119. HelpWork APPLIES IF IllWork1=Yes and IntSt2=1 and (WStat=1,3 or 4 or LFS Stat=1,3 or 4) and (TypeIll=1,2,4,5,6 or StressCa=Yes)

When you need/needed it, do/did you get enough help and support from the people in charge at work?

Yes 1
No 2

120. Noise APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=3,5,6 or StressCa=Yes)

In order to get an idea of how noisy your workplace is/was, when you are/were at work do/did you ever have to raise your voice while talking to people from a normal talking distance?

Yes 1
No 2

121. OftNoise APPLIES IF IllWork1=Yes and Noise=1

How often do/did you have to do this?

Always/almost always 1
About three quarters of the time 2
About half of the time 3
About a quarter of the time 4
Less often 5

122. Ringing APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=3,5,6 or StressCa=Yes)

Do/did you ever have work tasks that leave/left you with a ringing in your ears or a temporary feeling of deafness?

Yes 1
No 2

123. OftRing APPLIES IF IllWork1=Yes and Ringing=1

How often does/did this happen?

Daily 1
Weekly 2
Less often than weekly.....3

124. Attack APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=1,5,6 or StressCa=Yes)

Many jobs involve contact with members of the public. Occasionally this may result in argument or confrontation or even physical abuse. Have you ever been/were you ever physically attacked by a member of the public (such as a client, customer, patient) while in your job?

STILL REFERRING TO JOB THAT CAUSED OR MADE COMPLAINT WORSE

Yes 1
No 2

125. OftAtt APPLIES IF IllWork1=Yes and Attack=1 and NowEmp=1

How many times have you been attacked in the last year by a member of the public?

126. OftAttL APPLIES IF IllWork1=Yes and Attack=1 and NowEmp=2

About how many times were you attacked by a member of the public in a typical year in this job?

127. Threat APPLIES IF IllWork1=Yes and IntSt2=1 and (TypeIll=1,5,6 or StressCa=Yes)

Have you ever felt/did you ever feel threatened with physical violence while at work?

Yes 1
No 2

128. OftThret APPLIES IF IllWork1=Yes and Threat=1 and NowEmp=1

How many times have you felt threatened in the last year?

129. OftThrtL APPLIES IF IllWork1=Yes and Threat=1 and NowEmp=2

About how many times did you feel threatened in a typical year in this job?

****** **Questions 130-177 (inclusive) are only asked once, irrespective of the number of illnesses recorded****

130. IntStrss APPLIES IF IllWork1=Yes and TypeIll=5 or StressCa=1

Now I would like to ask you about your health in general

131. NowStrss APPLIES IF IllWork1=Yes and (TypeIll=5 and AffNow=1 for same illness)

May I just check, have you suffered from any of the following in the last four weeks, that is since (insert date 4wks ago)?

CODE ALL THAT APPLY

Feeling keyed up, on edge? 1
Worrying a lot? 2
Irritability? 3
Difficulty relaxing? 4
None of these - INTERVIEWER CODE 5

132. PastStrs APPLIES IF IllWork1=Yes and TypeIll=5 and AffNow=2 or 3

May I just check, when you were affected by your (insert Illtxt), did you suffer from any of the following?

CODE ALL THAT APPLY

Feeling keyed up, on edge? 1
Worrying a lot? 2
Irritability? 3
Difficulty relaxing? 4
None of these - INTERVIEWER CODE 5

133. RelStrss APPLIES IF IllWork1=Yes and TypeIll NE 5 and StressCa=1

You said earlier that your (insert IllTxt) was caused/made worse by stress or pressure at work. May I just check, when you feel/felt under pressure or stress at work, do/did you suffer from any of the following?

CODE ALL THAT APPLY

Feeling keyed up, on edge? 1
Worrying a lot? 2
Irritability? 3
Difficulty relaxing? 4
None of these - INTERVIEWER CODE 5

134. MreStrs APPLIES IF IllWork1=Yes and 2 or more of codes 1-4 coded at RELSTRSS, NOWSTRSS OR PASTSTRS

... and any of the following?

CODE ALL THAT APPLY

Sleeping poorly? 1
Headaches or neckaches? 2
Trembling, tingling, dizzy spells, sweating, diarrhoea? 3
Worrying about your health? 4
Difficulty falling asleep? 5
None of these - INTERVIEWER CODE ONLY 6

135. PlusStr APPLIES IF IllWork1=Yes and TypeIll=5 or StressCa=Yes

... and any of the following?

CODE ALL THAT APPLY

Low energy? 1
Loss of interests? 2
Loss of self-confidence? 3
Feeling hopeless? 4
None of these - INTERVIEWER CODE ONLY? 5

136. XtraStrs APPLIES IF IllWork1=Yes and IF CODED 1-4 at PlusStrs

... and ...

CODE ALL THAT APPLY

Difficulty concentrating? 1
Loss of weight (due to poor appetite)? 2
Waking early? 3
Feeling slowed up? 4
Tendency to feel worse in the morning? 5
None of these - INTERVIEWER CODE ONLY 6

137. IntResp APPLIES IF IllWork1=Yes and TypeIll=2

I am now going to ask you some questions which refer to your breathing or lung/chest problem(s)

138. CoughWin APPLIES IF IllWork1=Yes and TypeIll=2

Do you usually have a cough, that is one that lasts at least 5 days a week?

Yes	1
No	2

139. Cough3M APPLIES IF IllWork1=Yes and TypeIll=2 and CoughWin=1

[*]
Do you cough like this on most days for as much as three consecutive months each year?

Yes	1
No	2

140. PhlgmWin APPLIES IF IllWork1=Yes and TypeIll=2

Do you usually bring up any phlegm from your chest?

Yes	1
No	2

141. Phlgm3M APPLIES IF IllWork1=Yes and TypeIll=2 and PhlgmWin=1

[*]
Do you bring up any phlegm on most days for as much as three consecutive months each year?

Yes	1
No	2

142. CoughWk APPLIES IF IllWork1=Yes and TypeIll=2

In the past three years have you had a period of (increased) coughing or phlegm lasting for three weeks or more?

Yes	1
No	2
Can't recall /Don't know	3

143. NumCough APPLIES IF IllWork1=Yes and TypeIll=2 and CoughWk=1

Have you had more than one such period?

Yes	1
No	2

144. GenWalk APPLIES IF IllWork1=Yes and TypeIll=2

Before I ask you some questions about breathlessness when walking, may I just check, do you have any other problems with walking such as rheumatism?

Yes	1
No	2
Unable to walk at all - SPONTANEOUS ONLY	3

145. Heart APPLIES IF IllWork1=Yes and TypeIll=2

ASK OR RECORD IF CLEAR FROM PREVIOUS RESPONSES

And do you suffer from heart disease?

Yes	1
No	2

146. ShortHil APPLIES IF IllWork1=Yes and TypeIll=2 and GenWalk NE 3

[*]
Are you troubled by shortness of breath when hurrying on level ground or walking up a slight hill?

Yes	1
No	2
Never walks uphill or hurries	3

147. ShortLev APPLIES IF IllWork1=Yes and Shorthill=1 or 3

[*]
Do you get short of breath walking with other people of your own age on level ground?

Yes	1
No	2
Never walks with people of own age on level ground	3

148. StopBrea APPLIES IF IllWork1=Yes and ShortLev=1 or 3

[*]
Do you have to stop for breath when walking at your own pace on level ground?

Yes	1
No	2

149. Wheeze12 APPLIES IF IllWork1=Yes and TypeIll=2

Have you at any time in the last 12 months, that is since (insert date) had prolonged episodes of wheezing or whistling in your chest?

Yes	1
No	2
Can't recall /Don't know	3

150. EpisNorm APPLIES IF IllWork1=Yes and TypeIll =2 and Wheeze12=1

[*]
Is/was your breathing absolutely normal between these episodes?

Yes	1
No	2

151. WheezAtt APPLIES IF IllWork1=Yes and TypeIll=2

[*]
Have you ever (including the last 12 months) had sudden attacks of wheezing or tightness in the chest that have made you feel short of breath?

Yes	1
No	2
Can't recall /Don't know	3

152. AttNorm APPLIES IF IllWork1=Yes and TypeIll=2 and WheezeAtt=1

[*]
Is/was your breathing absolutely normal between these attacks?

Yes	1
No	2

153. WokeShBr APPLIES IF IllWork1=Yes and TypeIll=2

[*]
Have you at any time in the last 12 months, that is since (insert date) been woken at night by wheezing or shortness of breath?

Yes	1
No	2
Can't recall /Don't know	3

154. ExerShBr APPLIES IF IllWork1=Yes and TypeIll=2

[*]
Do you ever get wheezing or shortness of breath brought on by exercise, smoky rooms or exposure to cold air?

Yes 1
No 2

155. Breathe APPLIES IF IllWork1=Yes and TypeIll=2

[*]
Which of the following statements BEST describes your breathing?

CODE FIRST THAT APPLIES

I never, or rarely, get trouble with my breathing 1
I get regular trouble with my breathing, but it always gets completely better 2
My breathing is never quite right 3

156. EverSmok APPLIES IF IllWork1=Yes and TypeIll=2

Have you ever smoked .....

CODE ALL THAT APPLY

Manufactured cigarettes? 1
Hand rolled cigarettes? 2
Cigars? 3
A pipe? 4
Never smoked 5

157. NowManCg APPLIES IF IllWork1=Yes and TypeIll=2 EverSmok=1

[*]
Do you smoke manufactured cigarettes at all nowadays?

Yes 1
No 2

158. NMnCigWD APPLIES IF IllWork1=Yes and TypeIll=2 EverSmok=1

About how many manufactured cigarettes do/did you usually smoke on a weekday?

159. NMnCigE APPLIES IF IllWork1=Yes and TypeIll=2 EverSmok=1

About how many manufactured cigarettes do/did you usually smoke a day on a weekend?

160. NowHndRl APPLIES IF IllWork1=Yes and TypeIll=2 EverSmok=2

[*]
Do you smoke hand rolled cigarettes at all nowadays?

Yes 1
No 2

161. NHndRol APPLIES IF IllWork1=Yes and TypeIll=2 EverSmok=2

About how much hand roll tobacco do/did you usually smoke in a week?

162. NowCigar APPLIES IF IllWork1=Yes and TypeIll=2 EverSmok=3

[*]
Do you smoke cigars at all nowadays?

Yes 1
No 2

163. NCigar APPLIES IF IllWork1=Yes and TypeIll=2 EverSmok=3

About how many cigars do/did you usually smoke in a week?

164. NowPipe APPLIES IF IllWork1=Yes and TypeIll=2 EverSmok=4

[*]
Do you smoke a pipe at all nowadays?

Yes 1
No 2

165. NPipe APPLIES IF Illwork1=1 and EverSmok=1

About how much pipe tobacco do/did you usually smoke in a week?

166. SmokAge APPLIES IF IllWork1=Yes and TypeIll=2 and EverSmok NE 5

How old were you when you started to smoke regularly ?
SPONTANEOUS ONLY - NEVER SMOKED REGULARLY CODE AS 0

167. SmokStop APPLIES IF IllWork1=Yes and TypeIll=2 and EverSmok NE 5 and NONE OF (NowMnCig, NowHndRl, NowCigar, NowPipe=1) and SmokAge NE 0

How long ago did you stop smoking regularly?

Less than 6 months ago 1
6 months but less than a year ago 2
1 year but less than 2 years ago 3
2 years but less than 5 years ago 4
5 years but less than 10 years ago 5
10 years or more ago 6

168. HayAsthm APPLIES IF IllWork1=Yes and TypeIll=2

Did you have asthma or hay fever as a child?

Yes 1
No 2
Can't recall /Don't know 3

169. IntHear APPLIES IF IllWork1=Yes and TypeIll=3

We are interested in finding out the extent of your hearing problem. If you wear a hearing aid, please answer the following questions as if you were not wearing your hearing aid.

170. BackNois APPLIES IF IllWork1=Yes and TypeIll=3

Do you find it very difficult to follow a conversation if there is a background noise, for example the television or radio or children playing?

Yes 1
No 2

171. QuWhisp APPLIES IF IllWork1=Yes and TypeIll=3

Can you usually hear and understand what a person says to you in a quiet room if they whisper to you?

Yes 1
No 2

172. QuSpeak APPLIES IF IllWork1=Yes and TypeIll=3 and QuWhisp=2

... if he or she speaks normally to you?

Yes 1
No 2

173. QuLoud APPLIES IF IllWork1=Yes and TypeIll=3 and QuSpeak=2

... if they speak loudly?

Yes 1
No 2

174. Noishead APPLIES IF IllWork1=Yes and TypeIll=3

Do you suffer severely from noises in the head (such as ringing, buzzing or whistling) ?

Yes 1
No 2

175. NoisTime APPLIES IF IllWork1=Yes and TypeIll=3 and NoisHead=1

Do these noises cause you severe distress all the time?

Yes 1
No 2

176. SeeDoc APPLIES IF IllWork1=Yes

During the 2 weeks ending yesterday, how many times have you talked to a doctor or other therapist for any reason?

INCLUDE TELEPHONE CONSULTATIONS

177. WorkDoc APPLIES IF IllWork1=Yes and SeeDoc >= 1

How many of these contacts were because of your work-related problems?

178. IntSt3 APPLIES IF IllWork1=Yes and WhoTreat=1,2,3 OR GPKnow=1

INTERVIEWER STATEMENT

Thank-you for your co-operation in this interview which was carried out on behalf of the Health and Safety Executive (HSE). In order to gain a more complete picture of your work-related illness(es), the HSE would like to approach your GP, or other doctors who have treated you, for further details about your illness(es).

179. IntSt3a APPLIES IF IllWork1=Yes and WhoTreat=1,2,3 OR GPKnow=1

To do this, we are asking for your permission to pass on the name and address of your doctor, and to release your name, address and details relating to your illness(es) to our colleagues at the HSE. All information will, of course, be held in confidence by the HSE and will only be used for statistical purposes.

180. GPForm APPLIES IF IllWork1=Yes and IntSt3a=1

Would you allow a doctor from the Health and Safety Executive to approach your GP, or other doctors who have treated you, for further details about your illness(es).

Yes	1
No	2

181.a-e. APPLIES IF (IllWork1=Yes)
TABLE (for entering illnesses)

The table contains the following:

182a. DrNo APPLIES IF GPForm=Yes and relevant illness seen by doctor or doctor aware

ENTER DOCTOR NUMBER

182b. DateDr APPLIES IF DrNo=Response

Can I just check, what was the (approximate) date of your most recent consultation for your (insert Illtxt)?

182c. DrName APPLIES IF DrNo=Response

What is your GPs (works doctor) (hospital doctor) name ?

182d. IntDr APPLIES IF DrNo=Response

HAVE YOU ALREADY RECORDED THE NAME AND ADDRESS OF THIS DOCTOR?

Yes 1
No 2

182e. DrAdd1 APPLIES IF IntDr=No

And what is your doctor's address?
PLEASE ASK RESPONDENT TO LOOK IT UP IF NECESSARY
INTERVIEWER PLEASE REMEMBER TO RECORD ONE LINE OF THE ADDRESS AT EACH SECTION

182f DrAdd2 APPLIES IF IntDr=No

SECOND LINE OF DOCTOR'S ADDRESS

182g DrAdd3 APPLIES IF IntDr=No

THIRD LINE OF DOCTOR'S ADDRESS

182h DrAdd4 APPLIES IF IntDr=No

FOURTH LINE OF DOCTOR'S ADDRESS

182i DrPCode APPLIES IF IntDr=No

POST CODE LINE OF DOCTOR'S ADDRESS

182j DrTel APPLIES IF IntDr=No

And what is your Doctor's telephone number?
PLEASE ASK THE RESPONDENT TO LOOK IT UP IF NECESSARY
INSERT STD CODE AND TELEPHONE NUMBER
IF STD CODE NOT KNOWN ENTER EXCHANGE NAME

182. IntSt4 APPLIES IF IllWork1=Yes bit in [] read out if respondent had not seen a doctor or GP not aware of problem and so not asked IntSt3

[Thank-you for your co-operation in this interview which was carried out on behalf of the Health and Safety Executive (HSE).] It would (also) be useful for their analysis if the HSE could be supplied with information that you provided in earlier interviews for the Labour Force Survey. (Again) all information will, of course, be held in confidence by HSE and will only be used for statistical purposes.

183. PassData APPLIES IF IllWork1=Yes and IntSt4=1

Would you allow information that you gave during this interview and earlier LFS interviews to be passed onto the HSE?

Yes	 1
No	 2

(END OF INTERVIEW)

APPENDIX 3

CONSENT FOR ACCESS TO MEDICAL RECORDS

N1388 Survey of Work-Related Illness - Contacting doctors [consent for access to medical records]

To be read by respondent

In order to gain a more complete picture of your work related illness(es), the Health and Safety Executive (HSE) would like to approach your GP, or other doctors who have treated you, for further details about your illness(es).

To do this, we are asking for your permission to pass on the name and address of your doctor, and to release your name, address and details relating to your illness(es) to our colleagues at the HSE. It would also be useful if the HSE could be supplied with information that you provided in earlier interviews for the Labour Force Survey. All information will, of course, be held in confidence by the HSE and will only be used for statistical purposes.

Serial number .....

Person number of respondent .....

RESPONDENTS NAME IN FULL

Mr/Mrs/Miss/Ms ....
Forename(s) Surname

Address .....

.....

DOCTOR'S NAME IN FULL (Please PRINT CLEARLY)

Dr .....

Full Postal Address .....

.....

Tel .....

Work-related illness Approximate date of most recent consultation

....

* Please complete a separate form for each work-related illness

---

Declaration to be read and signed by respondent

I agree that the Health and Safety Executive (HSE) may contact my GP, or other doctors I have consulted, in order to obtain information about the work-related illness(es) mentioned above. I also agree that the data I provided in interviews for the Labour Force Survey and the Work-Related Illness Survey can be released to and used by the HSE. I understand that the information will be treated in the strictest confidence and will only be used for statistical purposes.

Signed ..... Dated .....

APPENDIX 4

DOCTOR'S OR SPECIALIST'S

SURVEY OF WORK-RELATED ILLNESS

QUESTIONNAIRE FOR GP OR OTHER TREATING DOCTOR

Information reported by patient:

In an interview on <INVDATE> the patient named on the accompanying consent form reported that in the preceding 12 months they had suffered from an illness, disability or other physical problem that was caused or made worse by their work. (The work in question is not necessarily their current work)

The following extract from the interview describes the illness and the work in question as recorded by the interviewer:-

QUESTION	RESPONSE
1. In a few words how would you describe the illness or physical problem that was caused or made worse by your work?	**<DESCRIPTION>**
2. Do you know or remember what your doctor said was the matter with you?	**<DIAGNOSIS>**
3. Was your problem caused by your work or did your work simply make it worse?	**<WKCAUSE>**
4. What was your job that affected your complaint?	**Job Title: <OCCUPATION>** **Industry: <INDUSTRY>**
5. Can you describe in a few words how your work <QCAUSE>?	**<HOWCAUSE>**

The date of your patient's most recent consultation for this complaint was reported as: <TRDATE>.

SURVEY OF WORK-RELATED ILLNESS

Information requested from doctor :

1. Do you have a record of a complaint for this patient that might fit the previous description? ***(Please tick one box only)***

☐ YES

☐ NO - no record of having seen this patient either directly or through their employer.

☐ NO - none of the recorded consultations fit the previous description.

☐ UNCLEAR - the patient had consultation(s) (at least one) but on the available information I cannot be sure which (if any) they had in mind when making the responses.

*If **YES** please continue, **OTHERWISE** please return this form.*

2. Has the patient reported their diagnosis accurately?

☐ YES ☐ NO

If NO, please give a more accurate diagnosis *(please help our input staff by writing technical words clearly)*

.....

3. On what date was the earliest recorded consultation for this condition?

MONTH ☐☐ YEAR ☐☐

4. During consultation(s) on this condition, was the patient's work discussed?

☐ YES ☐ NO ☐ DON'T RECALL / DON'T KNOW

*If **YES**, please continue, **OTHERWISE** go to Question 6.*

5. Did your patient suggest that their work caused or exacerbated their condition?

☐ YES ☐ NO ☐ DON'T RECALL / DON'T KNOW

SURVEY OF WORK-RELATED ILLNESS

6. Please tick the boxes (one in each row) which best represent your opinion of the relationship between the patient's work and their illness. Use the space below if you have any additional comments.

	The patient's work is					
	Definitely	**Probably**	**Possibly**	**Unlikely to be**	**Definitely not**	**Insufficient information**
The main underlying cause of their illness						
A contributory underlying cause of their illness						
A cause of symptoms of their illness						

Additional comments:

7. Has your patient been referred to a specialist for this illness?

☐ YES ☐ NO

*If **NO**, please return this form.*

If YES, please indicate the specialism(s) consulted for this illness by ticking the appropriate box(es)

☐ Dermatology ☐ Respiratory medicine

☐ Orthopaedics ☐ Occupational medicine

☐ Neurology ☐ Psychology

☐ Rheumatology ☐ Psychiatry

☐ Other(s) (please specify) .....

APPENDIX 5

CONTROL POPULATION QUESTIONNAIRE

The following questions are for the Health and Safety Executive

21

122 **1. Interviewer check**

Respondent is working or away from job last week (Q117=1 or Q177a=1)	1	➔5
Respondent not currently working but has been in paid employment (Q122=1)	2	➔2
Never been in paid work (Q122 = 2)	3	➔Next modules

22

122 **2.** May I just check, have you had a full-time job....

within the last 8 years	1	
9 to 10 years ago	2	➔3
more than 10 years ago	3	
never had a full-time job?	4	➔46

23/24

122 **3.** In which year did you leave this job?

Enter year ➔ 19 1

25/26

122 **4.** And which month was that?

Enter month ➔ 1

27

I would like to ask you some questions about different aspects of your work in your current/last full-time job. Each question asks whether some description applies/applied to your work and if it does/did how often.

122 **5.** Do/did you ever feel you have/had too much work to do?

Yes	1	➔6
No	2	➔7

28

122 **6.** How often does/did this happen?

Show card C122.6

Always/almost always	1
About three quarters of the time	2
About half of the time	3
About a quarter of the time	4
Less often	5

29

122 **7.** Do/did you ever feel you have/had too little work to do?

Yes	1	➔8
No	2	➔9

				30	
122	**8.**	How often does/did this happen?			
			Always/almost always	1	
		Show card C122.6	About three quarters of the time.....	2	
			About half of the time.....	3	
			About a quarter of the time	4	
			Less often	5	
				31	
122	**9.**	Does/did your job ever involve repeating the same sequence of movements many times?			
			Yes	1	**➔10**
			No	2	**➔11**
				32	
122	**10.**	How often does/did this happen?			
			Always/almost always	1	
		Show card C122.6	About three quarters of the time	2	
			About half of the time	3	
			About a quarter of the time	4	
			Less often	5	
				33	
122	**11.**	Does/did your job ever involve working in awkward or tiring positions?			
			Yes	1	**➔12**
			No	2	**➔13**
				34	
122	**12.**	How often does/did this happen?			
			Always/almost always	1	
		Show card C122.6	About three quarters of the time	2	
			About half of the time	3	
			About a quarter of the time	4	
			Less often	5	
				35	
122	**13.**	Does/did your job ever involve working very fast?			
			Yes	1	**➔14**
			No	2	**➔15**

			36	
122	**14.** How often does/did this happen?			
		Always/almost always	1	
	Show card C122.6	About three quarters of the time.....	2	
		About half of the time.....	3	
		About a quarter of the time	4	
		Less often	5	
			37	
122	**15.** Does/did your job ever involve working to tight deadlines?			
		Yes	1	**➔16**
		No	2	**➔17**
			38	
122	**16.** How often does/did this happen?			
		Always/almost always	1	
	Show card C122.6	About three quarters of the time	2	
		About half of the time	3	
		About a quarter of the time	4	
		Less often	5	
			39	
122	**17.** Does/did your job ever involve using appreciable force?			
		Yes	1	**➔18**
		No	2	**➔19**
			40	
122	**18.** How often does/did this happen?			
		Always/almost always	1	
	Show card C122.6	About three quarters of the time	2	
		About half of the time	3	
		About a quarter of the time	4	
		Less often	5	
			41	
122	**19.** Does/did your job ever involve lifting or moving heavy loads?			
		Yes	1	**➔20**
		No	2	**➔23**

42

122 **20.** How often does/did this happen?

Show card C122.6

Always/almost always	1
About three quarters of the time.....	2
About half of the time.....	3
About a quarter of the time	4
Less often	5

43

122 **21.** When your job involves/involved you in lifting or moving heavy loads does/did this involve twisting or stooping?

Yes	1	➔**22**
No	2	➔**23**

44

122 **22.** Thinking of the times you lift/lifted or move/moved heavy loads, how often does/did this involve twisting or stooping?

Show card C122.6

Always/almost always	1
About three quarters of the time.....	2
About half of the time.....	3
About a quarter of the time	4
Less often	5

45

122 **23.** Does/did your job ever involve the use of power tools which transmit/transmitted vibration into your hands?

Yes	1	➔**24**
No	2	➔**25**

46

122 **24.** How often does/did this happen?

Show card C122.6

Always/almost always	1
About three quarters of the time	2
About half of the time	3
About a quarter of the time	4
Less often	5

47

122 **25.** Does/did your job ever involve you sitting or standing on a vibrating machine or in a vibrating vehicle?

Yes	1	➔**26**
No	2	➔**27**

			48	
122	**26.** How often does/did this happen?			
		Always/almost always	1	
	Show card C122.6	About three quarters of the time.....	2	
		About half of the time.....	3	
		About a quarter of the time	4	
		Less often	5	
			49	
122	**27.** Does/did your job ever expose you to uncomfortable heat or cold? **(includes hot and cold weather)**			
		Yes	1	**➔28**
		No	2	**➔29**
			50	
122	**28.** How often does/did this happen?			
		Always/almost always	1	
	Show card C122.6	About three quarters of the time.....	2	
		About half of the time.....	3	
		About a quarter of the time	4	
		Less often	5	
			51	
122	**29.** Does/did your job ever expose you to breathing fumes, dusts or other harmful substances?			
		Yes	1	**➔30**
		No	2	**➔31**
			52	
122	**30.** How often does/did this happen?			
		Always/almost always	1	
	Show card C122.6	About three quarters of the time	2	
		About half of the time	3	
		About a quarter of the time	4	
		Less often	5	
			53	
122	**31.** Does/did your job ever require you to handle or touch harmful substances or materials?			
		Yes	1	**➔32**
		No	2	**➔33**

54

122 **32.** How often does/did this happen?

Show card C122.6

Always/almost always	1
About three quarters of the time.....	2
About half of the time.....	3
About a quarter of the time	4
Less often	5

55

122 **33.** Can/could you ever choose or change the order of your tasks or your method of working?

Yes	1	➔**34**
No	2	➔**35**

56

122 **34.** How often can/could you do this?

Show card C122.6

Always/almost always	1
About three quarters of the time.....	2
About half of the time.....	3
About a quarter of the time	4
Less often	5

57

122 **35.** When you need/needed it, do/did you get enough help and support from the people in charge at work?

Yes	1
No	2

58

122 **36.** In order to get an idea of how noisy your workplace is/was, do/did you ever have to raise your voice while talking to people from a normal talking distance?

Yes	1	➔**37**
No	2	➔**38**

59

122 **37.** How often does/did this happen?

Show card C122.6

Always/almost always	1
About three quarters of the time	2
About half of the time	3
About a quarter of the time	4
Less often	5

			60	
122	**38.**	Do/did you ever have work tasks that leaves/left you with a ringing in your ears or a temporary feeling of deafness?		
		Yes	1	**➔39**
		No	2	**➔40**
			61	
122	**39.**	How often does/did this happen?		
		Daily	1	
		Weekly	2	
		Or less often	3	

			62	
122	**40.**	Many jobs involve contact with members of the public and occasionally this may result in argument or confrontation or even physical abuse. Thinking about your current/last full-time job have you ever been/were you ever physically attacked by a member of the public (such as client, customers, patients etc) while in your job?		
		Yes.....	1	**➔41**
		No	2	**➔44**
			63	
122	**41.**	**Interviewer check**		
		Respondent is working or away from job last week. (Q122.1 code 1)	1	**➔42a**
		Respondent worked full-time in last 10 years. (Q122.2 codes 1, 2)	2	**➔42b**
		All others	3	**➔46**
			64/65	
122	**42a.**	How many times have you been attached in the last year by a member of the public?		
122	**42b.**	About how many times were you attacked in a typical year in this job?		
		Enter number of attacks ➔	...1...	
			66	
122	**43.**	Thinking about your current/last full-time job have you every felt/did you ever feel threatened with physical violence while at work?		
		Yes	1	
		No	2	
			67	
122	**44.**	**Interviewer check**		
		Respondent is working or away from job last week. (Q1 code 1).....	1	**➔45a**
		Respondent worked full-time in last 10 years. (Q2 codes 1, 2)	2	**➔45b**
			68/69	
122	**45a.**	How many times have you felt threatened in the last year?		
122	**45b.**	About how many times did you feel threatened in a typical year in this job?		
		Enter number of times ➔	...1...	

I am now going to ask you some questions mainly about problems you might have with your chest.

70

122 **46.** Do you usually have a cough, that is one that lasts at least 5 days a week?

Yes	1	➔**47**
No	2	➔**48**

71

122 **47.** Do you cough on most days for as much as three consecutive months each year?

Yes	1	
No	2	

72

122 **48.** Do you usually bring up any phelgm from your chest?

Yes	1	➔**49**
No	2	➔**50**

73

122 **49.** Do you bring up any phlegm on most days for as much as three consecutive months each year?

Yes	1	
No	2	

74

122 **50.** In the past three years have you had a period of (increased) coughing or phlegm lasting for three weeks or more?

Yes	1	➔**51**
No	2	➔**52**
Can't recall/don't know	3	➔**52**

75

122 **51.** Have you had more than one such period?

Yes	1	
No	2	

76

122 **52.** I would now like to ask you some questions about whether you suffer from breathlessness when walking, but first can you tell me if you have any other problems with walking such as rheumatism?

Yes	1
No	2
spontaneous: unable to walk at all	3

77

122 **53.** Do you suffer from heart disease?

Yes	1
No	2

78

122 **54. Interviewer check**

Not able to walk (Q52 code 3)	1	➔**58**
All other	2	➔**55**

79

122 **55.** Are you troubled by shortness of breath when hurrying on level ground or walking up a slight hill?

Yes	1	➔**56**
No	2	➔**58**
Never walks uphill or hurries	3	➔**56**

*

80

122 **56.** Do you get short of breath walking with other people of your own age on level ground?

Yes	1	➔**57**
No	2	➔**58**
Never walks with people of own age on level ground	3	➔**57**

*

81

122 **57.** Do you have to stop for breath when walking at your own pace on level ground?

Yes	1	
No	2	

*

82

122 **58.** Have you at any time in the last 12 months had prolonged episodes of wheezing or whistling in your chest?

Yes	1	➔**59**
No	2	
Can't recall/don't know	3	➔**60**

83

122 **59.** Is/was your breathing absolutely normal between these episodes?

*

Yes 1

No 2

84

122 **60.** Have you ever (including the last 12 months) had sudden attacks of wheezing or tightness in the chest that have made you feel short of breath?

*

Yes ..... 1 →**61**

No 2

Can't recall/don't know ..... 3 →**62**

85

122 **61.** Is/was your breathing absolutely normal between these attacks?

*

Yes 1

No 2

86

122 **62.** Have you at any time in the last 12 months been woken at night by wheezing or shortness of breath?

*

Yes 1

No 2

Can't recall/don't know 3

87

122 **63.** Do you ever get attacks of wheezing or shortness of breath brought on by exercise, smoky rooms or exposure to cold air?

*

Yes 1

No 2

88

122 **64.** Which of the following statements best describes your breathing?

*****

Read each statement before coding

I never, or rarely, get trouble with my breathing 1

I get regular trouble with my breathing, but it always gets completely better 2

My breathing is never quite right 3

				89/92	**mc = 4**
122	**65.**	Have you ever smoked			
		Code all that apply	manufactured cigarettes	1	
			hand rolled cigarettes	2	**➔66**
			cigars	3	
			a pipe?	4	
			never smoked	5	**➔82**
				93	
122	**66.**	**Interviewer check** Has respondent smoked manufactured cigarettes (Q65 = 1)?			
			Yes	1	**➔67**
			No	2	**➔70**
				94	
122	**67.**	Do you smoke manufactured cigarettes at all nowadays?			
			Yes	1	
			No	2	
				95/96	
122	**68.**	About how many manufactured cigarettes a day do/did you usually smoke on a weekday?			
			Enter number ➔	...1...	
				97/98	
122	**69.**	And how many manufactured cigarettes a day do/did you usually smoke on a weekend?			
			Enter number ➔	...1...	
				99	
122	**70.**	**Interviewer check** Has respondent ever smoked hand rolled cigarettes (Q65 = 2)?			
			Yes	1	**➔71**
			No	2	**➔73**
				100	
122	**71.**	Do you smoke hand rolled cigarettes at all nowadays?			
			Yes	1	
			No	2	
				101/102	
122	**72.**	About how much hand roll tobacco do/did you usually smoke in a week?			
			Enter Number of half ounce or 12 and half gram packets➔	.....	
				103	
122	**73.**	**Interviewer check** Has respondent ever smoked cigars (Q65 = 3)?			
			Yes	1	**➔74**
			No	2	**➔76**

			104	
122	**74.**	Do you smoke cigars at all nowadays?		
		Yes	1	
		No	2	
			105/106	
122	**75.**	About how many cigars do/did you usually smoke in a week?		
		Enter number of cigars ➔	...1...	
			107	
122	**76.**	**Interviewer check** Has respondent ever smoked a pipe (Q65 = 4)?		
		Yes	1	**➔77**
		No	2	**➔79**
			108	
122	**77.**	Do you smoke a pipe at all nowadays?		
		Yes	1	
		No	2	
			109/110	
122	**78.**	About how much pipe tobacco do/did you usually smoke in week?		
		Enter Number of half ounce or 12 and half gram packets➔	.....	
			111/112	
122	**79.**	How old were you when you started to smoke regularly?		
		Enter age ➔	...1...	**➔80**
		Spontaneous: never smoked regularly	00	**➔82**
			113	
122	**80.**	**Interviewer check**		
		Respondent smokes manufactured cigarettes nowadays (Q67 = 1)	1	
		Code first that applies smokes hand rolled cigarettes nowadays (Q71 = 1)	2	**➔82**
		smokes cigars nowadays (Q73 = 1)	3	
		smokes pipes nowadays (Q77 = 1)	4	
		does not smoke anything nowadays	5	**➔81**
			114	
122	**81.**	How long ago did you stop smoking regularly?		
		Less than 6 months ago	1	
		6 months but less than a year ago	2	
		Show card C122.81 1 year but less than 2 years ago	3	
		2 years but less than 5 years ago	4	
		5 years but less than 10 years ago	5	
		10 years or more ago	6	

			115	
122	**82.**	Did you have asthma or hay fever as a child?		
		Yes	1	
		No	2	
		Can't recall/don't know	3	
			116	
		The next few questions are about your hearing. If you wear a hearing aid, please answer the following questions as if you were not wearing your hearing aid.		
122	**83.**	Do you find it very difficult to follow a conversation if there is a background noise, for example the television or radio or children playing?		
		Yes	1	**➔84**
		No	2	**➔87**
			117	
122	**84.**	Can you usually hear and understand what a person says to you in a quiet room if they whisper to you?		
		Yes	1	**➔87**
		No	2	**➔85**
			118	
122	**85.**	Can you usually hear and understand what a person says to you in a quiet room if they speak normally to you?		
		Yes	1	**➔87**
		No	2	**➔86**
			119	
122	**86.**	Can you usually hear and understand what a person says to you in a quiet room if they speak loudly?		
		Yes	1	
		No	2	
			120	
122	**87.**	Do you suffer severely from noises in the head or ears (such as ringing, buzzing or whistling)?		
		Yes	1	**➔88**
		No	2	**➔89**
			121	
122	**88.**	Do these noises cause you severe distress all of the time?		
		Yes	1	
		No	2	**➔89**

Now I would like to ask you about your health in general.

122/125

122 **89.** Have you suffered from any of the following in the last four weeks? **mc = 4**

Code all that apply	Feeling keyed up, on edge?	1	
	Worrying a lot?	2	→**90**
	Irritability	3	
	Difficulty relaxing?	4	
Interviewer code -	None of these	5	→**91**

126/130

122 **90.** And any of the following in the last four weeks? **mc = 5**

	Sleeping poorly?	1
Code all that apply	Headaches or neck aches?	2
	Trembling, tingling, dizzy spells, sweating, diarrhoea?	3
	Worrying about your health?	4
	Difficulty falling asleep?	5
Interviewer code -	None of these	6

131/134

122 **91.** Have you suffered from any of the following in the last four weeks? **mc = 4**

Code all that apply	Low energy?	1	
	Loss of interests?	2	
	Loss of self confidence?	3	→**92**
	Feeling hopeless?	4	
Interviewer code -	None of these	5	→**93**

135/139

122 **92.** And any of the following in the last four weeks? **mc = 5**

Code all that apply	Difficulty concentrating?	1
	Loss of weight (due to poor appetite)?	2
	Waking early?	3
	Feeling slowed up?	4
	Tending to feel worse in the morning?	5
Interviewer code -	None of these	6

			140/141
122	**93.**	During the 2 weeks ending yesterday, how many times have you talked to a doctor or other therapist for any reason? **Include telephone consultations** **Enter number of times ➔**	...1...

APPENDIX 6

Disease groupings (mutually exclusive groups)

1. Stress, depression or anxiety
2. Stress ascribed heart disease, hypertension or stroke
3. Stress ascribed diseases of the digestive system
4. Stress ascribed other conditions
5. Headache or "eyestrain"
6. Deafness, tinnitus or other ear conditions
7. Vibration white finger
8. Asthma symptoms only[θ]
9. Asthma & chronic bronchitis symptoms[θ]
10. Other lower respiratory disease[Φ] or unspecified
11. Pneumoconiosis
12. Skin disease
13. Musculoskeletal disease
    - Back
    - Upper limb or neck (ULN)
    - Lower limbs (LL)
    - Back & ULN
    - Back & LL
    - ULN & LL
    - Back & ULN & LL or whole body
    - Internal
14. Trauma
15. "Other" diseases

[θ] *See section 3.1.2*
[Φ] *Includes cases reporting chronic bronchitis symptoms only*

APPENDIX 7

Disease groupings (not mutually exclusive)

1. "Stress"
   - Stress, depression or anxiety
   - Stress ascribed illnesses

2. Headache or "eyestrain"

3. Deafness, tinnitus or other ear conditions

4. Lower respiratory disease
   - Chronic bronchitis symptoms°
   - Asthma symptoms°

5. Pneumoconiosis

6. Skin

7. Musculoskeletal disorders
   - Backs affected$^{\Sigma}$
   - Upper limbs or neck affected$^{\Sigma}$
   - Lower limbs affected$^{\Sigma}$

8. Vibration white finger

9. Trauma

10. "Other" diseases

° *See section 3.1.2*
$^{\Sigma}$ *See section 3.1.3*

"How Cause" coding frame

Main group	Sub-groups
Manual Handling (moving things)	Pushing or pulling Lifting Carrying Other (none of the above) Not specified (general manual handling)
Awkward or static posture (include any fixed or constrained posture)	Prolonged sitting or driving Kneeling or crawling Crouching or squatting Bending or stooping Twisting Reaching or stretching Standing for long periods Poor workstation or bad ergonomics Confined or restricted space Other Not specified (general bad or awkward posture)
Frequency of work (continuously repeating a series of movements)	Using keyboard or typing Other repetitive physical tasks (incl. writing)
Vibration	Use of hand or power tools (driven by air, electricity or a petrol motor and transmit energy into worker's hands, eg. pneumatic road breaker, chain saw, lawn mower, floor polisher, etc.) Machines or Vehicles (which transmit vibration into the worker's body either through a seat or the surface the worker is standing on, eg. tractor, fork-lift truck, etc.)
Applied Force (e.g. Gripping a tool or work piece), squeezing (two handles)	
Physical Exertion/strenuous manual activity, requiring effort, eg. hammering, digging, shovelling, sawing, climbing stairs, scrubbing, running, continual walking, (not manual handling)	

continued

Main group	Sub-groups
Accident	Contact with moving machinery or material being machined Struck by moving, including flying or falling object - includes accidents involving powered handtools Struck against something fixed or stationary, stepping on something Injured while handling, lifting or carrying. Slip, trip or fall on same level. Fall from a height Exposure to an explosion Road accident whilst driving or travelling in a vehicle in the course of work Struck by a moving vehicle Other kind of accident Cause of accident not known
Workload/pace e.g. too much work (including resource problems -staff,funding, equipment), too little work, high level of pacing or time pressure, too much responsibility, lack of control over work	Too much work Lack of resources (include short staffed, lack of equipment or funding) Pressure of work (include fast pace of work, tight deadlines) Too little work Responsibility (ie unable to cope with responsibilities in work) Other (none of the above) Not specified (general)
Work schedule eg. shiftwork, long hours, unpredictable hours,unsociable hours, limited rest breaks.	Long hours Work schedule (include shift work and working unsociable hours) Limited rest breaks Other (none of the above) Not specified (general)
Lack of support e.g. lack of understanding and leadership from management,stresses of self-employment, poor relationship with manager	
Relationships at work e.g.poor relationships with colleagues, interpersonal conflicts: bullying, victimisation, racial harrassment, violence and threats	Attacked or threatened Conflict or poor relationships Other

continued

Main group	Sub-groups
Contact with "members of the public" (clients, patients, customers, pupils)	Attacked or threatened Conflict or poor relationships Other
Actual or threatened change	Changes at work e.g. reorganisation, privatisation, national curriculum changes Career change or instability eg. redundancy Other
Reaction to accident or incident	
Dealing with sick or death of patient	
Dealing with dangerous situations	
Domestic problems (work makes condition worse)	
Stress (unspecified)	
Indoor climate	Passive smoking Air conditioning or lack of ventilation Draft or hot or cold Other
Outdoors (weather eg. hot, cold, damp,wet) - including mines	
Exposed to breathing fumes dusts or inhaling other harmful substances	
Handling or touching harmful substances (incl. allergens or irritants)	

continued

Main group	Sub-groups
Noise	Noisy environment Blasts or Gun Fire Other
Visual work	VDU Close work Lighting Other
Contact with infectious agent	
War conditions - including gun shot wounds and the effects of working conditions during war	
Miscellaneous e.g. talking too much	
Unspecified	

Substance coding frame

Major group	Sub group
Dusts or fibres	Coal dust
	Paper or cardboard
	Textiles
	Wood
	Cement
	Cereals
	Other
	Unspecified
Asbestos	
Oils or Solvents or paints	Paints
	Oils or petrol
	Solvents
	Isocyanates
Smoke or fumes	Welding fumes or flux
	Cigarette smoke
	Motor exhausts
	Foundry
	Other
	Unspecified
Detergents or soaps or cleaning materials	
Acid or alkalis	Photographic chemicals
	Other
	Unspecified
Plastics or rubber or resins or adhesives	Glues or adhesives
	Rubber
	Resins
	Other or unspecified
Biological (incl. pathogens)	
Other	Lead
	Other metals
	Water based metal working fluids
	Unspecified chemicals
	Other

APPENDIX 9

OCCUPATIONAL GROUPINGS

Code	Group	SOC	Description
1	Professional & related supporting management	100	Gen. admin national gov (G5+)
		102	Local Gov. officers (admin. exec.)
		103	Gen. admin. national Gov. (HEO+)
		120	Treasurers and company finance
		121	Marketing and sales managers
		122	Purchasing managers
		123	Advertising and PR managers
		124	Personnel, training and industrial relations managers
		125	Organisation and methods & work study managers
		127	Company secretaries
		155	Customs & excise - immigration officers
		170	Property and estate management
		190	Officials of trade assoc., TUs, prof. bodies and charities
		191	Registrars and administrators of educ. est.
		240	Judges & officers of court
		241	Barristers and advocates
		242	Solicitors
		250	Chartered and certified accountants
		251	Management accountants
		252	Actuaries, economists and statisticians
		253	Management consultants, bus. analysts
		270	Librarians
		271	Archivists and curators
		348	Environmental health off.
		350	Legal service and related occ.
		360	Estimators, valuers
		361	Underwriters, claims assessors, brokers, inv. analysts
		362	Taxation experts
		363	Personnel and ind. relation officers
		364	Organisation and methods & work study officers
		390	Information officers
		394	Inspectors of factories, utilities and trading standards
		395	Other statutory inspectors nec
		399	Other assoc. prof. and tech. occ. nec
		613	Customs & excise officers etc.
		700	Buyers (retail trade)
		701	Buyers and purchasing officers (not retail)

2	Teaching	230	University and polytechnic teaching prof.
		231	Higher and further educ. teaching prof.
		233	Secondary teachers
		234	Primary and nursery teachers
		235	Special educ. teachers
3	Nursing	340	Nurses
		341	Midwives
		640	Asst. nurses, aux.
		643	Dental nurses
4	Other education and welfare	220	Medical practitioners
		221	Pharmacists
		222	Opticians
		223	Dental practitioners
		224	Veterinarians
		232	Educ. officers, school inspectors
		239	Other teaching prof.
		290	Psychologists
		291	Other social and behavioural scientists
		292	Clergy
		293	Social workers, probation officers
		342	Medical radiographers
		343	Physiotherapists
		344	Chiropodists
		345	Dispensing opticians
		346	Medical technicians, dental aux.
		347	Occ. and speech therapists, psychotherapists, therapist
		349	Other health ass. prof. nec
		371	Welfare, community and youth workers
		391	Vocational & industrial trainers
		392	Careers advisers and vocational guidance
		393	Driving instructors
		396	Occ. Hygienists and safety officers
		592	Dental technicians
5	Literary, artistic and sports	380	Authors etc.
		381	Artists etc
		382	Industrial designers
		383	Clothing designers
		384	Actors and entertainers
		385	Musicians
		386	Photographers etc.
		387	Prof. athletes, sports officials
		791	Window dressers, floral arrangers

6	Science and Engineering	200	Chemists
		201	Biologists and biochemists
		202	Physicists etc.
		209	Other natural scientists
		210	Civil, struc, mining and quarrying eng.
		211	Mechanical eng
		212	Electrical eng.
		213	Electronic eng.
		214	Software eng
		215	Chemical eng.
		216	Design and dev. eng.
		217	Process and prod. eng.
		218	Planning and QC eng.
		219	Other eng. and technologists nec
		260	Architects
		261	Town planners
		262	Building surveyors etc.
		300	Lab. technicians
		301	Eng. technicians
		302	Electrical technicians
		303	Architectural & town planning technicians
		304	Building and civil eng tech.
		309	Other scientific tech. nec
		310	Draughtsperson
		311	Building inspector
		312	Quantity surveyor
		313	Marine, insurance and other surveyors
		320	Computer analyst / programmers
		330	Air traffic controllers
		331	Aircraft flight deck officers
		332	Ship and hovercraft officers
		864	Routine laboratory testers
7	Managerial	101	General managers
		110	Prod. works and maintenance managers
		111	Managers in building & contracts
		112	Clerks of work
		113	Man. in mining & energy
		126	Computer sys. managers
		130	Credit controllers
		131	Bank managers etc.
		139	Other financial institute man.
		140	Transport man.
		141	Store controllers
		142	Warehousing man. etc
		171	Garage man. & proprietors
		173	Hotel & accom. man.
		174	Restaurant & catering man.

7	Managerial (continued)	175	Publicans etc
		176	Entertainment & sports man.
		177	Travel agency man.
		179	Man. & proprietors in service industries
		199	Other man. & admin. nec
8	Clerical	132	Civil service EOs
		400	Civil service AOs and AAs
		401	Local govt. clerical officers and assts.
		410	Accounts & wages clerks etc.
		411	Counter clerks & cashiers
		412	Debt, rent & other cash collectors
		420	Filing, computer & other record clerks
		421	Library assts., clerks
		430	Clerks nec
		440	Stores, despatch & prod. control clerks
		491	Tracers, drawing office assts.
		721	Retail cash desk & check out clerks
		940	Postal workers, mail sorters
		941	Messengers, couriers
9	Secretarial	450	Medical secretaries
		451	Legal secs.
		452	Typists & word processor ops.
		459	Other secs & PAs
		460	Receptionist
		461	Receptionist / telephonist
		462	Telephone ops.
		463	Radio & phone ops etc.
		490	Computer ops. data processing etc.
10	Selling	702	Importers & exporters
		703	Air commodity & ship brokers
		710	Technical & wholesale sales reps.
		719	Other sales reps nec
		720	Sales assts
		722	Petrol pump forecourt attends.
		730	Collector & credit agents
		731	Roundsperson, van salesperson
		732	Market & street traders
		733	Scrap metal dealers
		790	Merchandisers
		792	Telephone sales person
		954	Shelf fillers
11	Security & protective services	152	Police officers - inspectors & above
		153	Firemen - station officers & above
		154	Prison principal officers and above

11	Security & protective services (continued)	610	Police officers (sergeant & below)
		611	Firemen (leading officer & below)
		612	Prison officers (below principal)
		614	Traffic wardens
		615	Security guards etc
		619	Other security personnel nec
12	Catering	620	Chefs, cooks
		621	Waiters, waitresses
		622	Bar staff
		952	Kitchen porters
		953	Catering assistants
13	Care workers	370	Matrons, houseparents
		641	Hospital ward assistants
		642	Ambulance staff
		644	Care assistants & attendants
		650	Nursery nurses
		651	Playgroup leaders
		652	Educational assistants
		659	Other childcare occupations nec
		950	Hospital porters
14	Hair & beauty	172	Hairdressing managers & proprietors
		660	Hairdressers,barbers
		661	Beauticians & related occupations
15	Cleaners	670	Domestic housekeepers etc
		671	Housekeepers (non-domestic)
		672	Caretakers
		673	Launderers, dry cleaners etc
		958	Cleaners, domestics
16	Other personal services	630	Travel & flight attendants
		631	Railway station staff
		690	Undertakers
		691	Bookmakers
		699	Other personal services nec
		951	Hotel porters
		955	Lift & car park attendants
		956	Window cleaners
		957	Road sweepers
		959	Other sales, service occupations
17	Farming, fishing & forestry	160	Farm owners & managers etc
		169	Other farming etc managers
		594	Gardeners, groundspersons
		595	Horticultural trades

17	Farming, fishing & forestry (continued)	900	Farm workers
		901	Farm machinery drivers etc
		902	Other related farming occupations
		903	Fishing and related workers
		904	Forestry workers
18	Metal processing	510	Lathe, capstan etc operators
		511	Boring, drilling machine operators
		512	Grinding machine setters, operators
		513	Milling machine setters, operators
		514	Press setters, operators
		515	Tool makers, fitters etc
		516	Metal work, maintenance fitters
		517	Precision instrument makers etc
		518	Gold, precious stone etc workers
		519	Other setters, operators nec
		530	Smiths & forge workers
		531	Moulders, core makers, die casters
		532	Plumbers, heating etc engineers
		533	Sheet metal workers
		534	Metal plate workers, riveters etc
		535	Steel erectors
		536	Barbenders, steel fixers
		537	Welding trades
		540	Motor mechanics etc
		541	Coach & vehicle body builders
		542	Vehicle body repairers etc
		544	Tyre & exhaust fitters
		830	Furnace operatives (metal)
		831	Metal drawers
		832	Rollers
		833	Annealers, hardeners etc (metal)
		834	Electroplaters etc
		839	Other metal process operatives nec
		840	Machine tool operatives
		841	Automatic machine operatives
		842	Metal polishers
		843	Metal dressing operatives
		844	Shot blasters
		911	Foundry labourers
		912	Engineering etc labourers
		913	Fitters mates (metal, electrical)
19	Electrical processing	520	Electrical production fitters
		521	Electricians etc
		522	Electrical engineers (non-prof)
		523	Telephone fitters
		524	Cable jointers, lines repairers

19	Electrical processing (continued)	525	Radio, TV & video engineers
		526	Computer engineers etc
		529	Other electrical trades nec
		543	Auto electricians
		598	Office machinery mechanics
20	Textile processing	550	Weavers
		551	Knitters
		552	Warp preparers, dyers, finishers etc
		553	Sewing machinists etc
		554	Coach trimmers, upholsterers etc
		555	Shoe repairers etc
		556	Tailors & dressmakers
		557	Milliners, furriers etc
		559	Other textile workers nec
		810	Tannery production operatives
		811	Preparatory fibre processors
		812	Spinners, doublers, twisters
		813	Winders, reelers
		814	Other textiles operatives
21	Other processing	560	Originators & compositors
		561	Printers
		562	Bookbinders & print finishers
		563	Screen printers
		569	Other printing & related trades nec
		570	Carpenters & joiners
		571	Cabinet makers
		572	Case & box makers
		573	Pattern makers (moulds)
		579	Other woodworking trades nec
		578	Butchers / fishmongers managers etc
		580	Bakers, flour confectioners
		581	Butchers, meat cutters
		582	Fishmongers, poultry dressers
		590	Glass product & ceramics makers
		591	Glass product & ceramic finishers
		593	Music instrument makers, piano tuners
		596	Coach painters, other spray painters
		599	Other craft & related occupations nec
		800	Bakery etc process operatives
		801	Brewery etc process operatives
		802	Tobacco process operatives
		809	Other food etc process operatives
		820	Other chemical etc operatives nes
		821	Paper, wood etc process operatives
		822	Cutting etc machine operatives
		823	Glass, ceramics furnace operatives

21	Other processing (continued)	824	Rubber etc process operatives
		825	Plastics operatives etc
		826	Synthetic fibre makers
		829	Other chemical etc operatives
		890	Washers etc in mines & quarries
		891	Printing machine minders
		897	Woodworking machine operatives
		899	Other machine etc operatives nec
		919	Making, processing labourers
		893	Energy etc plant operatives
		894	Lubricators etc
22	Repetitive assembly, inspection	850	Asemblers etc (electronic goods)
		851	Assemblers etc (vehicles, metal)
		859	Other assemblers etc nec
		860	Inspectors etc (metal, electrical)
		861	Inspectors etc (other goods)
		862	Packers, bottlers etc
		863	Weighers, graders, sorters
		869	Other routine operatives nec
23	Construction	500	Bricklayers,Masons
		501	Roofers, tilers, cladders etc
		502	Plasterers
		503	Glaziers
		504	Builders, building contractors
		505	Saffolders, steeplejacks etc
		506	Floor, carpet, wall etc fitters
		507	Painters & decorators
		509	Other construction trades nec
		892	Water etc plant attendants
		895	Service pipe layers & jointers
		896	Construction operatives
		898	Mine & quarry workers (non-coal)
		920	Woodworkers mates
		921	Building trades mates
		922	Rail construction etc workers
		923	Road construction etc workers
		924	Paviours, kerb layers
		929	Other building etc labourers
24	Coal mining	597	Face trained coalmining workers etc.
		910	Coal mine labourers
25	Road transport operatives	870	Bus inspectors
		871	Road transport depot inspectors etc
		872	Drivers of road goods vehicles
		873	Bus & coach drivers

25	Road transport operatives (continued)	874	Cab drivers & chauffeurs
		875	Bus conductors
26	Other transport and machinery operatives	880	Seafarers (merchant navy) etc
		881	Railway inspectors, guards etc
		882	Railway engine drivers etc
		883	Railway signal etc operatives
		884	Shunters & points operatives
		885	Mechanical plant drivers etc
		886	Crane drivers
		887	Forklift & mechanical truck drivers
		889	Other transport & machinery ops nec
27	Materials moving and storing	441	Storekeepers & warehousepersons
		930	Stevedores, dockers
		931	Goods porters
		932	Slingers
		933	Refuse & salvage collectors
		934	Drivers mates
28	Armed Forces	150	Officers in UK armed forces
		151	Officers in non-UK armed forces
		600	NCOs & other ranks, UK armed forces
		601	NCOs & other ranks, non-UK forces
29	Miscellaneous	990	All other labourers etc
		999	All others (miscellaneous)
30	Missing	-9	Missing