

Medical Surveillance of Blood-Lead Levels

In British Workers over the Period 1992/93 to 2009/10

Contents

Summary	3
Introduction	4
Workforce under medical surveillance	5
Total number of workers	5
Males under surveillance	6
Females under surveillance	6
Results of blood-lead measurements	7
Males under surveillance	7
Females under surveillance	8
Employment in lead industry sectors	10
Males under surveillance	10
Females under surveillance	11
Lead based industry breakdown	12
Sector 01: Smelting, refining, alloying and casting	12
Males under surveillance	12
Females under surveillance	14
Sector 02: Lead battery industry	15
Males under surveillance	15
Females under surveillance	17
Sector 03: Badge and jewellery enamelling	18
Males under surveillance	18
Females under surveillance	19
Sector 04: Glass making	20
Males under surveillance	20
Females under surveillance	22
Sector 05: Manufacture of pigments and colours	23
Males under surveillance	23
Females under surveillance	24

Sector 06: Potteries, glazes and transfers	25
Males under surveillance	25
Females under surveillance	27
Sector 07: Manufacture of inorganic and organic compounds	28
Males under surveillance	28
Females under surveillance	29
Sector 08: Shipbuilding, repairing and breaking	30
Males under surveillance	30
Females under surveillance	31
Sector 09: Demolition industry	32
Males under surveillance	32
Females under surveillance	33
Sector 10: Painting of buildings and vehicles	34
Males under surveillance	34
Females under surveillance	35
Sector 11: Work with metallic lead and lead containing alloys	36
Males under surveillance	36
Females under surveillance	38
Sector 12: Other processes	39
Males under surveillance	39
Females under surveillance	41
Sector 13: Scrap industry	42
Males under surveillance	42
Females under surveillance	43
Appendix	44
All workers under medical surveillance	45
Workers under medical surveillance in the smelting, refining, alloying and casting sector	47
Workers under medical surveillance in the lead battery industry	49
Workers under medical surveillance in the badge and jewellery enamelling sector	51
Workers under medical surveillance in the glass making sector	53
Workers under medical surveillance in the manufacture of pigments and colours sector	55
Workers under medical surveillance in the potteries, glazes and transfers sector	57
Workers under medical surveillance in the manufacture of inorganic and organic compounds sector	59
Workers under medical surveillance in the shipbuilding, repairing and breaking sector	61
Workers under medical surveillance in the demolition sector	63
Workers under medical surveillance in the painting of building and vehicles sector	65
Workers under medical surveillance in the work with metallic lead and lead containing alloys sector	67
Workers under medical surveillance in other processes	69
Workers under medical surveillance in the scrap industry	71

Summary

This document describes statistics for blood-lead measurements taken under statutory medical surveillance for work with lead over the period 1992/93 to 2009/10. This is the period for which the collected medical surveillance data is complete and available electronically.

The document can be found at www.hse.gov.uk/statistics/causdis/lead/index.htm.

There was an overall reduction in the number of British workers under medical surveillance for work with lead over the past 18 years. Women have consistently accounted for a small proportion of the total under surveillance, and the number of young people (under 18 years) under surveillance remains low.

Over the 18 year period of medical surveillance the data show:

- The total number of workers under medical surveillance fell by 66% from 21,113 in 1992/93 to 7,162 in 2009/10.
- The two industry sectors with the highest number of males under surveillance from 1992/93 to 2009/10 were the smelting, refining, alloying and casting sector and the lead battery industry.
- The number of males with blood-lead levels of 70µg/100ml or above fell from 196 in 1992/93 to 15 in 2009/10.
- The number of males with blood-lead levels of 60µg/100ml or above fell from 774 in 1992/93 to 52 in 2009/10.
- Over the course of the regulations 2 young males have been recorded with blood-lead levels of 50µg/100ml or above: one in 1998/99 in smelting, refining, alloying and casting and another in 2003/04 in the scrap industry.
- The number of males suspended due to blood-lead measurements fell from 147 in 1992/93 to 51 in 2009/10.
- The industry sector with the highest number of females under surveillance was the potteries, glazes and transfers sector until 2004/05, after which the lead battery industry was the main industry employing females.
- The number of females with blood-lead levels of 40µg/100ml or above fell from 41 in 1992/93 to none in 2009/10.
- The number of females with blood-lead levels of 30µg/100ml or above fell from 64 in 1996/97 (no information on blood-lead levels under 40µg/100ml is available before this year) to 3 in 2009/10.
- Over the course of the regulations 1 young female has been recorded with a blood-lead level of 30µg/100ml or above; in 1999/2000 and employed in other processes
- The number of females suspended due to blood-lead measurements fell from 5 in 1992/93 to 0 in 2009/10.

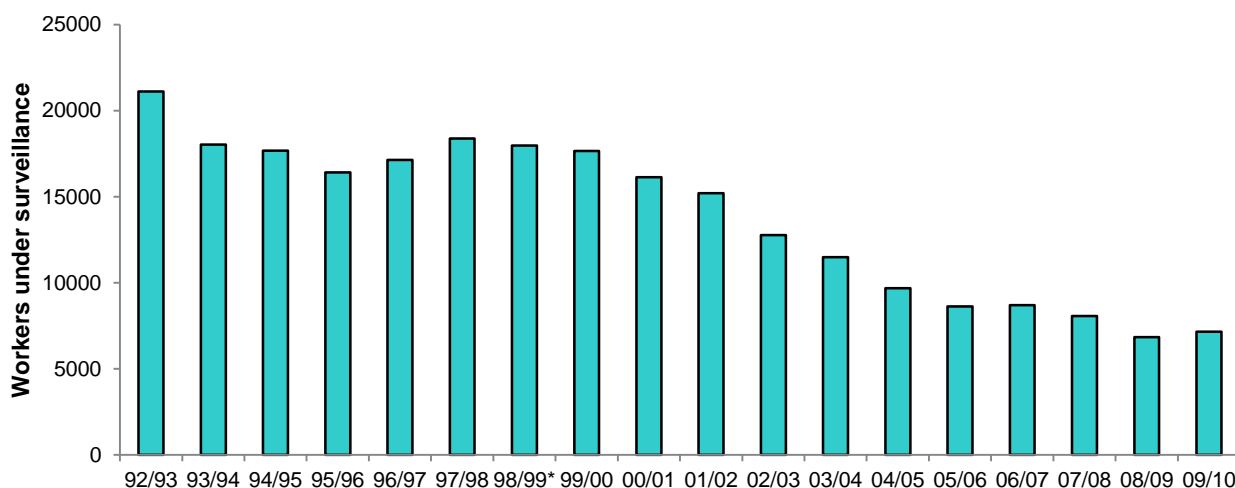


Figure 1 The total number of British lead workers under medical surveillance from 1992/93 to 2009/10

Introduction

Lead, including its alloys and compounds, can lead to a range of medical problems, including lead poisoning. Exposure to lead can occur in many occupations, via inhalation, ingestion or dermal contact.

Prior to the introduction of the Control of Lead at Work (CLAW) Regulations in August 1981, there were ten individual regulations that covered the use of Lead, including regulations on “paint and colour manufacture”, “lead smelting and manufacture” and “lead compounds manufacture”.

Under the CLAW regulations all workers with significant exposure to lead (workers whose potential exposure or recorded measurements exceed half the exposure limits defined by the regulations or are otherwise advised by an appointed doctor) are required to undergo medical surveillance. The regulations provide blood-lead concentration levels (micrograms per 100 millilitres of blood; $\mu\text{g}/100\text{ml}$) at which workers should either be protected or removed from working with lead; action and suspension limits respectively (Table 1). Over the 18 year period covered by this report the suspension levels have been lowered for males and females under medical surveillance and additional action limits introduced. Since 1998/99, separate information has also been collected on young people (aged under 18 years) under medical surveillance.

Table 1 Summary of the Control of Lead at Work (CLAW) Regulations 1980, 1998 and 2002

	CLAW Regulations 1980	CLAW Regulations 1998 and 2002
Came into force	August 1981	April 1998 Unchanged in November 2002
Collection	Calendar years 1982-1986 Financial years 1987/88 onwards	Financial years
Male and other workers		
Suspension level	80 $\mu\text{g}/100\text{ml}$ 1982-1985 70 $\mu\text{g}/100\text{ml}$ 1986 onwards	60 $\mu\text{g}/100\text{ml}$
Action level	-	50 $\mu\text{g}/100\text{ml}$
Female workers of reproductive capacity		
Suspension level	40 $\mu\text{g}/100\text{ml}$	30 $\mu\text{g}/100\text{ml}$
Action level	-	25 $\mu\text{g}/100\text{ml}$
Young workers (aged under 18 years)		
Suspension level	-	50 $\mu\text{g}/100\text{ml}$
Action level	-	40 $\mu\text{g}/100\text{ml}$

HSE’s Medical Inspectors, HSE Appointed Doctors (who are the main group of doctors carrying out statutory medical surveillance of lead-exposed workers in GB), and a body of scientific evidence would indicate that it is often the case that individuals with blood-lead levels at or above the suspension limit and who are suspended from working with lead do not have symptoms normally described as “lead poisoning”. Such workers are therefore removed from further exposure to lead to reduce the likelihood of such symptoms developing.

In the absence of more detailed data, all women are assumed to be of reproductive capacity, thus the lower suspension/action limits are used for all females in the results presented.

Over the period that this report covers the blood-lead sector classifications for surveillance data remained unchanged. The industry sector categories were revised in 2010 to better reflect current working practices and conditions.

A detailed discussion of the basis for the statistics and their potential limitations is available on the data sources page, see www.hse.gov.uk/statistics/sources.htm#lead for more information.

Workforce under medical surveillance

Total number of workers

The total number of workers under medical surveillance fell by 66% from 21,113 in 1992/93 to 7,162 in 2009/10 (Table 2). Women accounted for only a small proportion of the total number of workers under surveillance over this period (5.3% in 1992/93 and 3.4% in 2009/10).

Table 2 Breakdown of workers under medical surveillance

Year	Males	% Males	Females	% Females	Total	Individuals Suspended
92/93	20001	94.7%	1112	5.3%	21113	152
93/94	17199	95.4%	831	4.6%	18030	128
94/95	16821	95.2%	854	4.8%	17675	133
95/96	15455	94.2%	949	5.8%	16404	84
96/97	16210	94.6%	922	5.4%	17132	69
97/98	17523	95.4%	848	4.6%	18371	58
98/99	17199 (41)	95.7%	776 (6)	4.3%	17975 (47)	197
99/00	16832 (46)	95.4%	813 (8)	4.6%	17645 (54)	124 (1)
00/01	15411 (33)	95.6%	716 (15)	4.4%	16127 (48)	94
01/02	14577 (17)	95.9%	620 (3)	4.1%	15197 (20)	110
02/03	12245 (25)	95.9%	528 (3)	4.1%	12773 (28)	73
03/04	11011 (32)	95.9%	467 (7)	4.1%	11478 (39)	93 (1)
04/05	9267 (26)	95.7%	418	4.3%	9685 (26)	67
05/06	8278 (12)	96.1%	340 (10)	3.9%	8618 (22)	60
06/07	8376 (4)	96.3%	321 (4)	3.7%	8697 (8)	29
07/08	7752 (7)	96.1%	317	3.9%	8069 (7)	29
08/09	6563 (19)	96.1%	268 (3)	3.9%	6831 (22)	17
09/10	6916 (8)	96.6%	246	3.4%	7162 (8)	51 (1)

Figures are for the total number of workers under medical surveillance, of which the number under 18 years of age is given in brackets

The number of young people (under 18 years) under medical surveillance has decreased to 8 individuals in 2009/10; this compares with 47 individuals in 1998/99, when data on young people were first available.

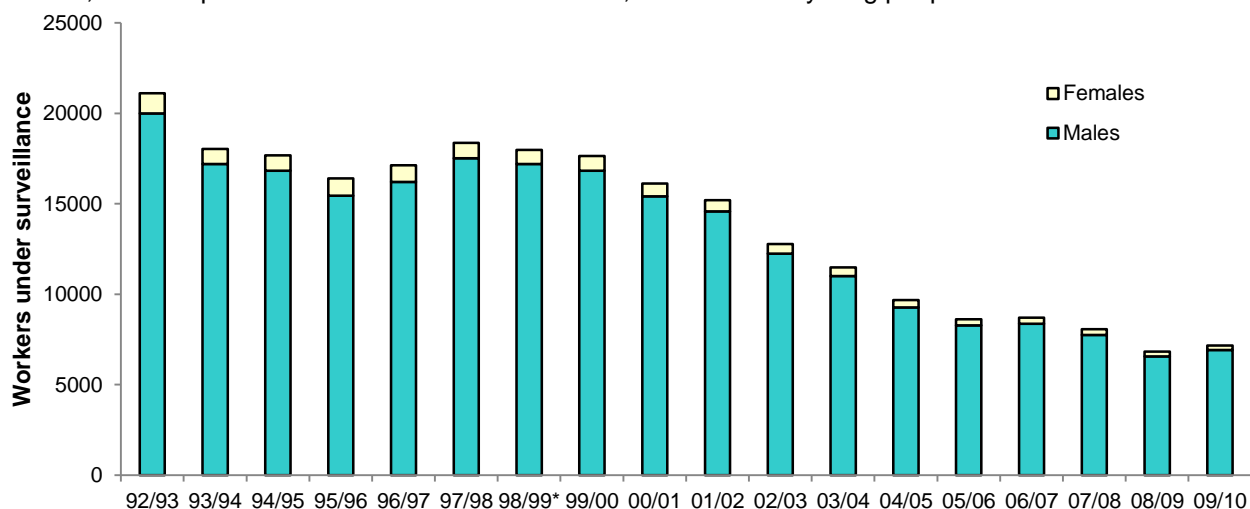


Figure 2 The total number of British lead workers under medical surveillance since 1992/93 by sex

Males under surveillance

- In 1992/93 there were 20,001 males under surveillance, by 2009/10 this had fallen to 6,916 males
- In 1998/99 41 young males were under surveillance, this has reduced to 8 young males under surveillance in 2009/10
- The number of male workers under medical surveillance who were suspended from working with lead has steadily reduced from 147 in 1992/93 to 51 in 2009/10, after an increase corresponding to the reductions in the suspension/action levels in 1998/99

Females under surveillance

- In 1992/93 there were 1,112 females under surveillance, by 2009/10 this had fallen to 246 females
- In 1998/99 6 young females were under surveillance, this remains low and no young females were under surveillance in 2009/10
- The number of female workers under medical surveillance who were suspended from working with lead has remained low with 5 in 1992/93 and none in 2009/10. There was an increase to 18 females suspended corresponding to the reductions in the suspension/action levels in 1998/99

Results of blood-lead measurements

All figures are based on the highest recorded blood-lead level for each individual. The number of females under medical surveillance is small and tends to fluctuate from year to year; making changes over time difficult to interpret. There are also difficulties interpreting changes over time for the number of suspensions and the number above the suspension and action limits as these limits have changed over the 18 year period covered by this report.

Detailed summary tables of blood-lead levels by sex and industrial sector can be found in the appendix.

An assessment of the trend in the proportion of measurements $>40\mu\text{g}/100\text{ml}$ (males under medical surveillance), $>25\mu\text{g}/100\text{ml}$ (females under medical surveillance) and $<10\mu\text{g}/100\text{ml}$ (males and females under medical surveillance) was made by fitting logistic regression models. Results are not presented for sector/sex combinations where the data is sparse and/or the proportions did not change.

Males under surveillance

- The number of males recorded with high blood-lead levels (a recorded level above the suspension limit) has decreased over the past 18 years.
 - In 1992/93, 196 male workers (1.0% of male workers) had a recorded blood-lead level at or above $70\mu\text{g}/100\text{ml}$
 - In 1998/99 (the introduction of revised limits), 71 male workers (0.4% of male workers) had a recorded blood-lead level at or above $70\mu\text{g}/100\text{ml}$
 - In 2009/10, 15 male workers (0.2% of male workers) had a recorded blood-lead level at or above $70\mu\text{g}/100\text{ml}$
 - In 1992/93, 774 males (3.9% of male workers) had a recorded blood-lead level at or above $60\mu\text{g}/100\text{ml}$
 - In 1998/99 (the introduction of revised limits), 322 males (1.9% of male workers) had a recorded blood-lead level at or above $60\mu\text{g}/100\text{ml}$
 - In 2009/10, 52 male workers (0.8% of male workers) had a recorded blood-lead level at or above $60\mu\text{g}/100\text{ml}$
- Over the course of the regulations 2 young males have been recorded with high blood-lead levels (a blood-lead level at or above $50\mu\text{g}/100\text{ml}$), one in 1998/99 and another in 2003/04; these individuals are not included in the figure stated above for all males
- There is a downward trend in the number of males suspended from working with lead due to excess blood-lead levels
 - In 1992/93, 147 male workers (0.7% of male workers) were suspended from work
 - There was an increase in 1998/99 to 179 males (1.0% of male workers) suspended from work
 - In 2009/10, 51 male workers (0.7% of male workers) were suspended from work
 - These figures include 2 young males who were suspended from work; one in 2003/04 and another in 2009/10

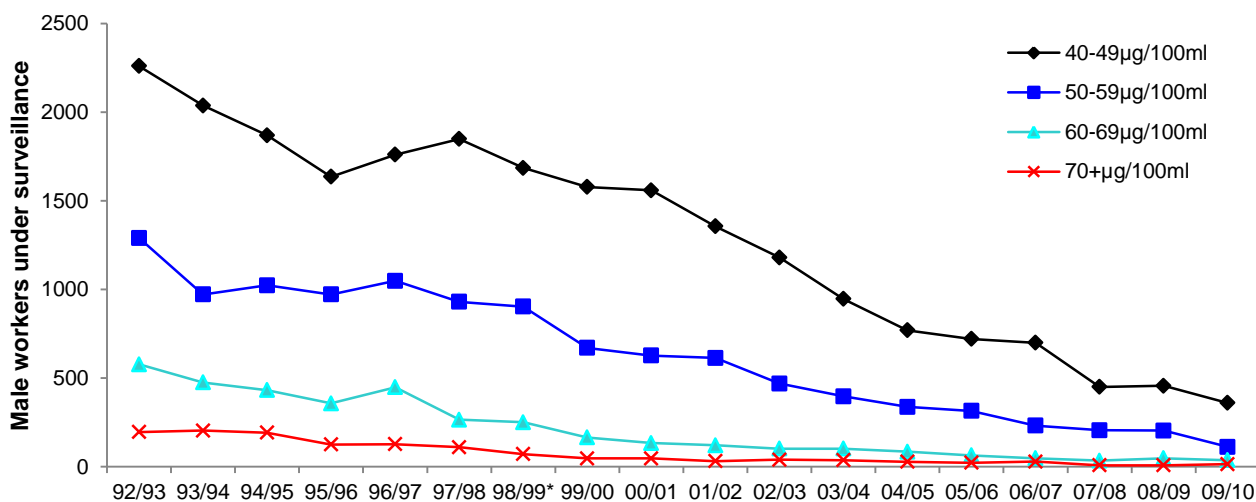


Figure 3 The breakdown of male lead workers under medical surveillance since 1992/93 with elevated blood-lead levels ($>40\mu\text{g}/100\text{ml}$)

- In 1992/93 the median male blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median male blood-lead level was within the range 20-24µg/100ml. Over the following 13 years the median male blood-lead level reduced to within the range 10-19µg/100ml in 2009/10
- The proportion of males recorded with a blood-lead level >40µg/100ml has decreased from 21.6% of male workers in 1992/93 to 7.6% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement greater than 40µg/100ml decreased by 6% (Figure 4, left hand panel)
- The proportion of males recorded with a blood-lead level <10µg/100ml has increased from 25.4% of male workers in 1998/99 to 37.0% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than 10µg/100ml increased by 4% (Figure 4, right hand panel)

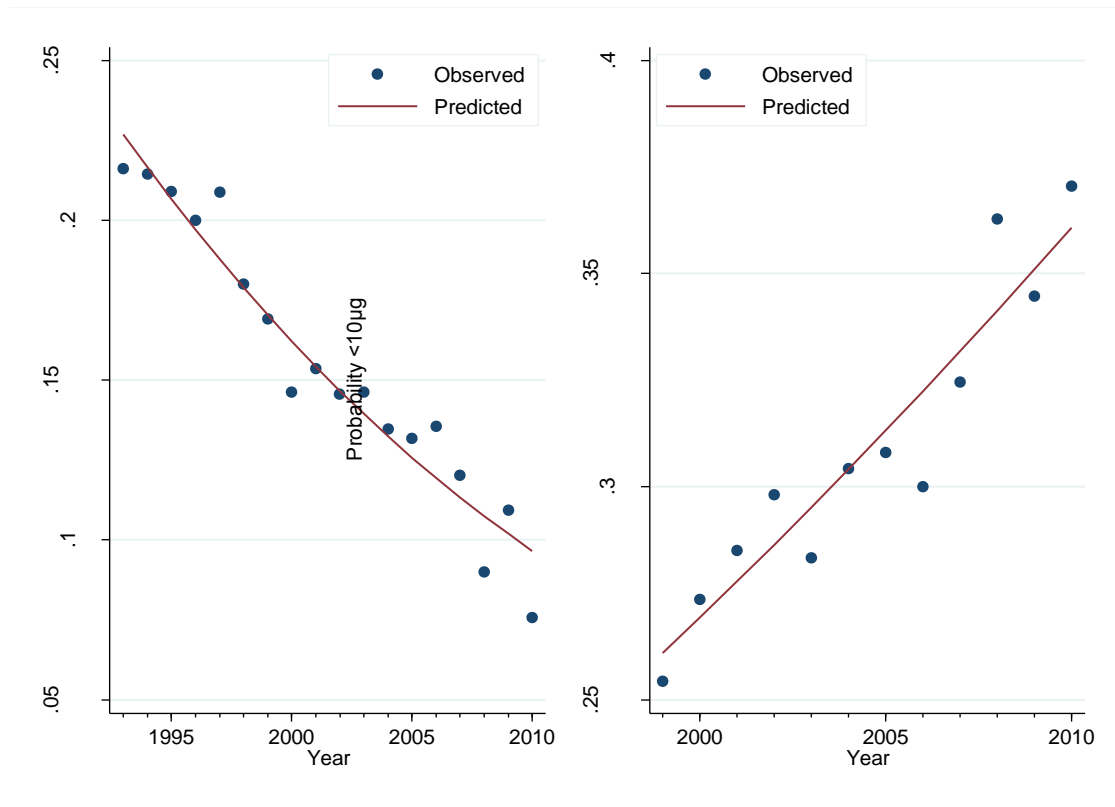


Figure 4 Probability of male blood-lead measurement by year [predicted by logistic regression]. The graph on the left is for the probability of a male blood-lead measurement >40µg/100ml. The graph on the right is for the probability of a male blood-lead measurement <10µg/100ml

Females under surveillance

- The number of females recorded with high blood-lead levels (a recorded level above the suspension limit) has decreased over the past 18 years.
 - In 1992/93, 41 female workers (3.7% of female workers) had a recorded blood-lead level at or above 40µg/100ml
 - In 1998/99 (the introduction of revised limits), 18 female workers (2.3% of female workers) had a recorded blood-lead level at or above 40µg/100ml
 - In 2009/10, no female workers had a recorded blood-lead level at or above 40µg/100ml
 - In 1998/99 (the introduction of revised limits), 50 female workers (6.4% of female workers) had a recorded blood-lead level at or above 30µg/100ml
 - In 2009/10, 3 female workers had a recorded blood-lead level at or above 30µg/100ml
 - No data are available for lower blood-lead ranges in 1992/93 for comparison
- Over the course of the regulations 1 young female has been recorded with high blood-lead levels (a blood-lead level at or above 30µg/100ml) in 1999/2000; this individual is included in the figure stated above for all females
- The number of females suspended from working with lead due to excess blood-lead levels has remained low throughout the surveillance period
 - In 1992/93, 5 female workers (0.4% of female workers) were suspended from work
 - There was an increase in 1998/99 to 18 females (2.3% of female workers) suspended from work
 - In 2009/10, no females were suspended from work
 - These figures include 1 young female who was suspended from work in 1999/2000

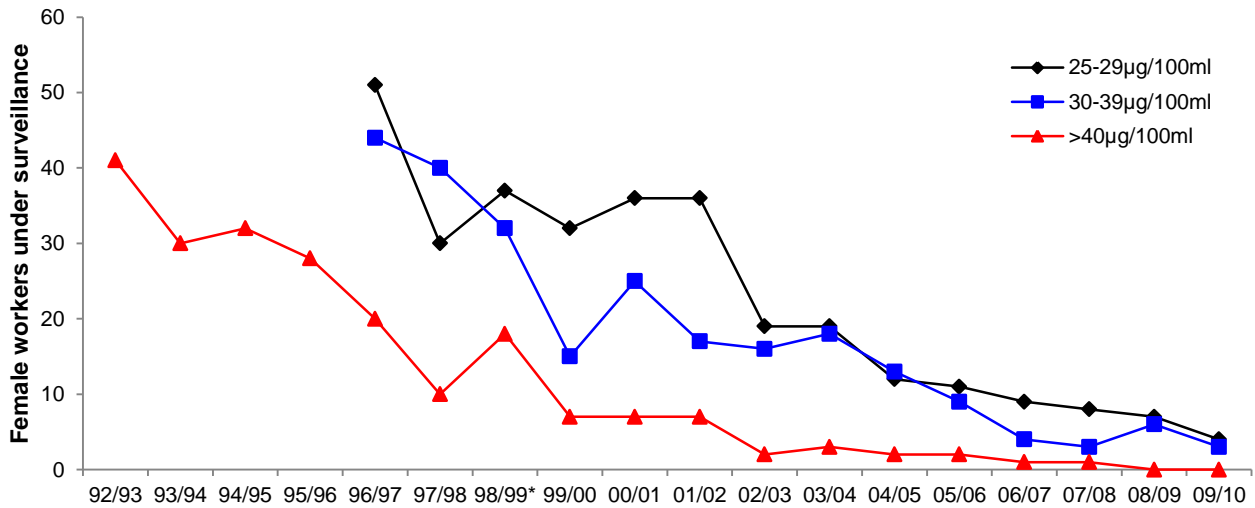


Figure 5 The breakdown of female lead workers under medical surveillance since 1992/93 with elevated blood-lead levels (>25µg/100ml)

- In 1992/93 the median female blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median female blood-lead level was under 20µg/100ml. Over the following 13 years the median female blood-lead level reduced to under 10µg/100ml in 2009/10
- The proportion of females recorded with a blood-lead level >25µg/100ml has decreased from 12.5% of female workers in 1996/97 to 2.8% of female workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement greater than 25µg/100ml decreased by 8% (Figure 6, left hand panel)
- The proportion of females recorded with a blood-lead level <10µg/100ml has increased from 49.6% of female workers in 1998/99 to 72.4% of female workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than 10µg/100ml increased by 12% (Figure 6, right hand panel)

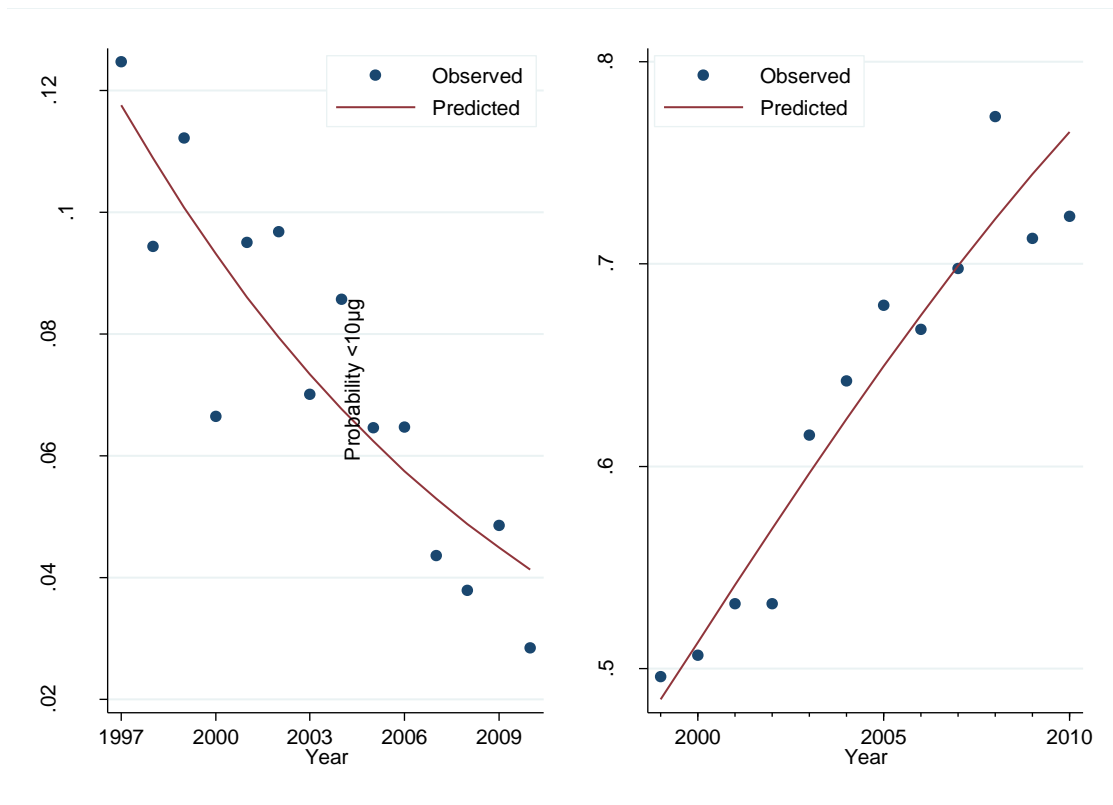


Figure 6 Probability of female blood-lead measurement by year [predicted by logistic regression]. The graph on the left is for the probability of a female blood-lead measurement >25µg/100ml. The graph on the right is for the probability of a female blood-lead measurement <10µg/100ml

Employment in lead industry sectors

The leading three industry sectors are the smelting, refining, alloying and casting industry, the lead battery industry and industries involving “other processes”; which includes many smaller industries that are not covered by the broader industry sector category descriptions. These three industry sectors account for approximately 60% of those under medical surveillance. Due to the small numbers of females involved in medical surveillance, comparisons between years may not be reliable.

Males under surveillance

The main industries that employed the largest number of males included in medical surveillance over the period 1992/93 to 2009/10 were the smelting, refining, alloying and casting sector, the lead battery industry and work involving “other processes”.

Over the period, the number of males under medical surveillance has:

- Increased in the scrap industry, from 145 males (0.7% of male workers) in 1992/93 to 515 males (7.4% of male workers) in 2009/10;
- Reduced in the smelting, refining, alloying and casting sector, from 5398 males (27.0% of male workers) in 1992/93 to 1321 males (19.1% of male workers) in 2009/10; and
- Reduced in the manufacture of inorganic and organic compounds industry, from 2438 males (12.2% of male workers) in 1992/93 to 270 males (3.9% of male workers) in 2009/10.

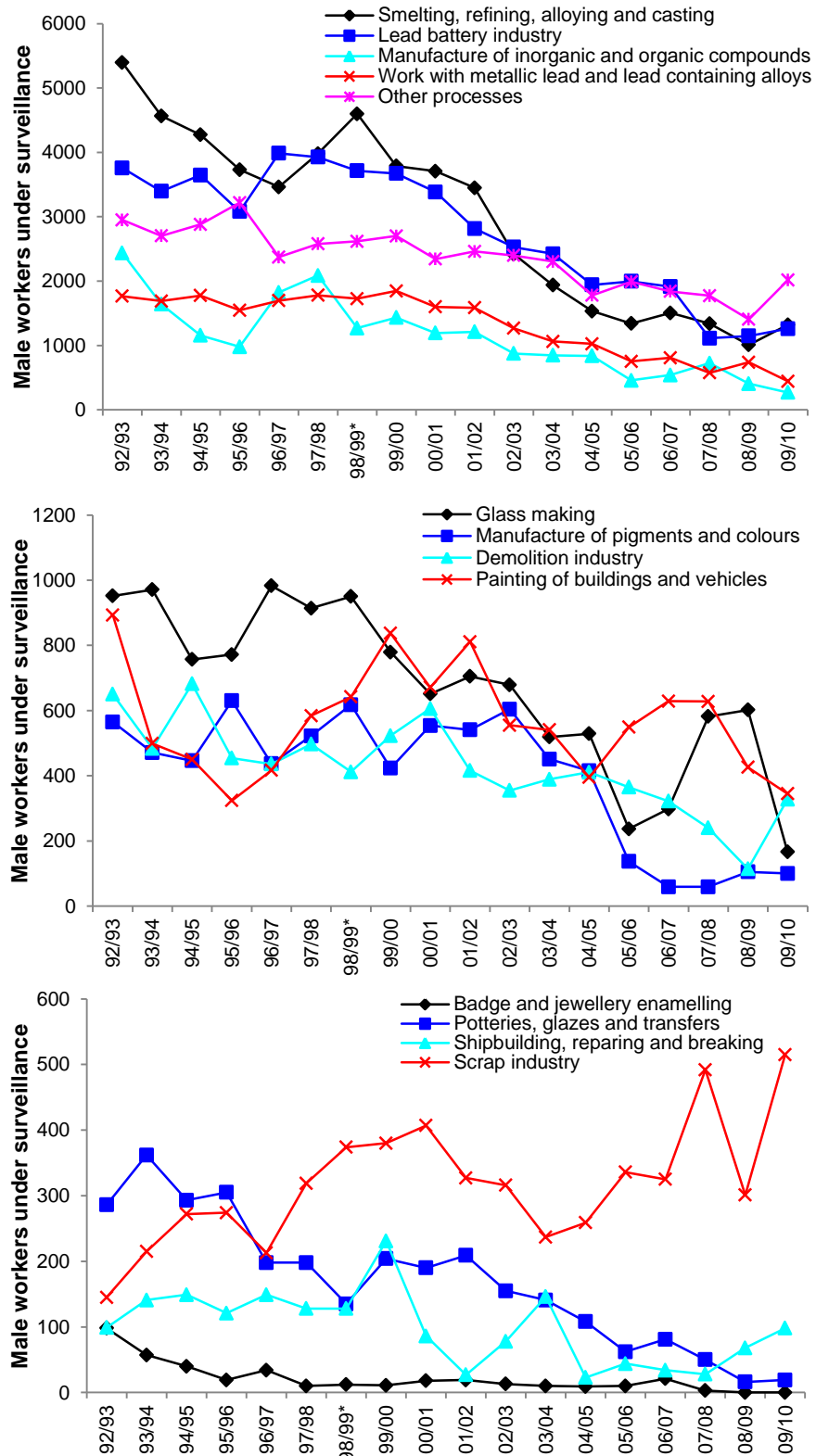


Figure 7 The breakdown of male lead workers under medical surveillance from 1992/93 to 2009/10 by industrial sector

Females under surveillance

The main industries that employed the largest number of females included in medical surveillance over the period 1992/93 to 2009/10 were the lead battery industry, the potteries, glazes and transfers industry and industries involving work with metallic lead and lead containing alloys.

Over the period, the number of females under surveillance has:

- Increased in the scrap industry, from 1 female (0.1% of female workers) in 1992/93 to 22 females (8.9% of female workers) in 2009/10;
- Reduced in the potteries, glazes and transfers sector, from 179 females (16.1% of female workers) in 1992/93 to 7 females (2.8% of female workers) in 2009/10; and
- Reduced in the manufacture of inorganic and organic compounds industry, from 182 females (16.4% of female workers) in 1992/93 to no females in 2009/10.

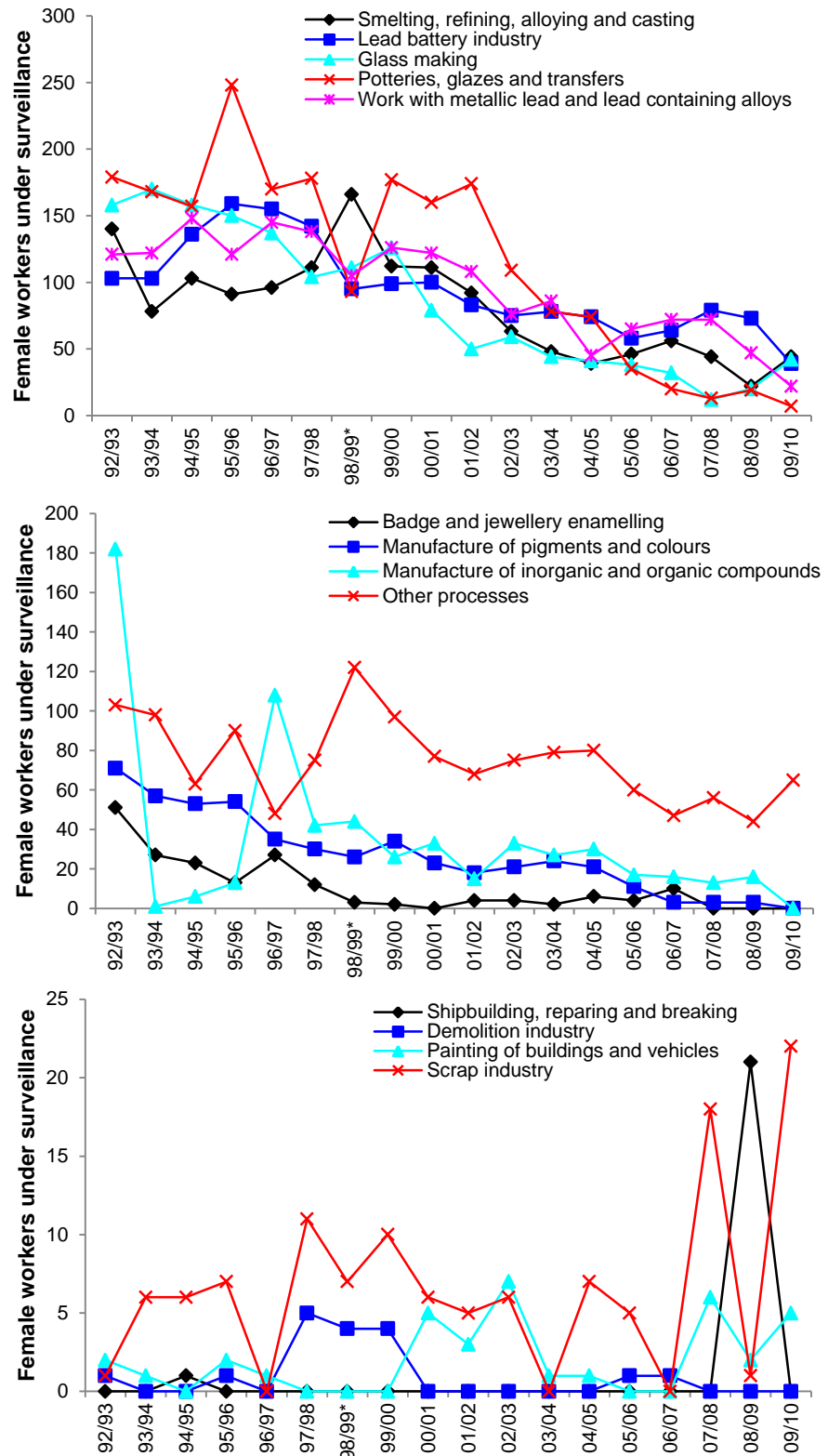


Figure 8 The breakdown of female lead workers under medical surveillance from 1992/93 to 2009/10 by industrial sector

Lead based industry breakdown

Sector 01: Smelting, refining, alloying and casting

The number of workers under medical surveillance in the smelting, refining, alloying and casting sector fell by 75% from 5,538 in 1992/93 to 1,365 in 2009/10. The number of young people (under 18 years) under medical surveillance has also decreased from 7 individuals in 1998/99 to 2 individuals in 2009/10; after an increase to 15 individuals in 2000/01.

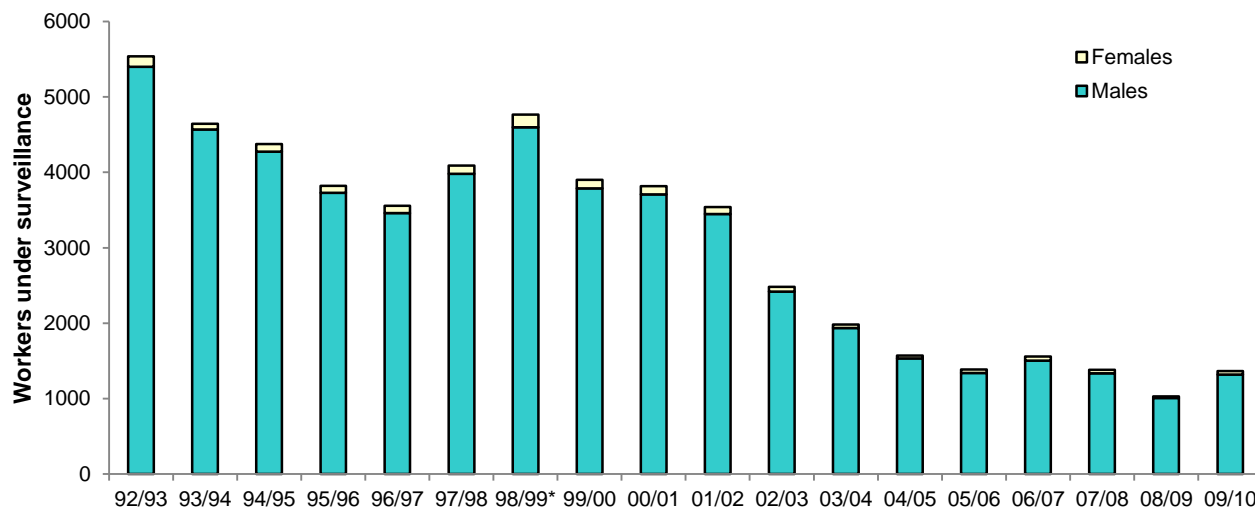


Figure 9 The total number of British lead workers under medical surveillance in the smelting, refining, alloying and casting sector since 1992/93 by sex

Males under surveillance

- In 1992/93 there were 5,398 males under surveillance in the smelting, refining, alloying and casting sector; by 2009/10 this had fallen to 1,321 males
- The number of young males under surveillance has decreased from 7 in 1998/99 to 2 in 2009/10
- In 1992/93 there were 46 males (0.9% of male workers) with a recorded blood-lead level at or above 70µg/100ml; this reduced to none in 2009/10
- In 1992/93 there were 195 males (3.7% of male workers) with a recorded blood-lead level at or above 60µg/100ml; this reduced to 1 male (0.1% of male workers) in 2009/10
- Over the course of the regulations 1 young male has been recorded with high blood-lead levels (a blood-lead level at or above 50µg/100ml) in 1998/99, this individual is not included in the figure stated above
- The number of male workers under medical surveillance who were suspended from working with lead has steadily reduced from 52 in 1992/93 to 1 in 2009/10, after an increase corresponding to the reductions in the suspension/action levels in 1998/99
- In 1992/93 the median male blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median male blood-lead level was within the range 25-29µg/100ml. Over the following 13 years the median male blood-lead level reduced to within the range 10-19µg/100ml in 2009/10
- The proportion of males recorded with a blood-lead level >40µg/100ml has decreased from 25.2% of male workers in 1992/93 to 3.1% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement greater than 40µg/100ml decreased by 8% (Figure 10, left hand panel)
- The proportion of males recorded with a blood-lead level <10µg/100ml has fluctuated over the period with 24.3% of male workers in 1998/99 and 23.2% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than 10µg/100ml decreased by 2% (Figure 10, right hand panel)

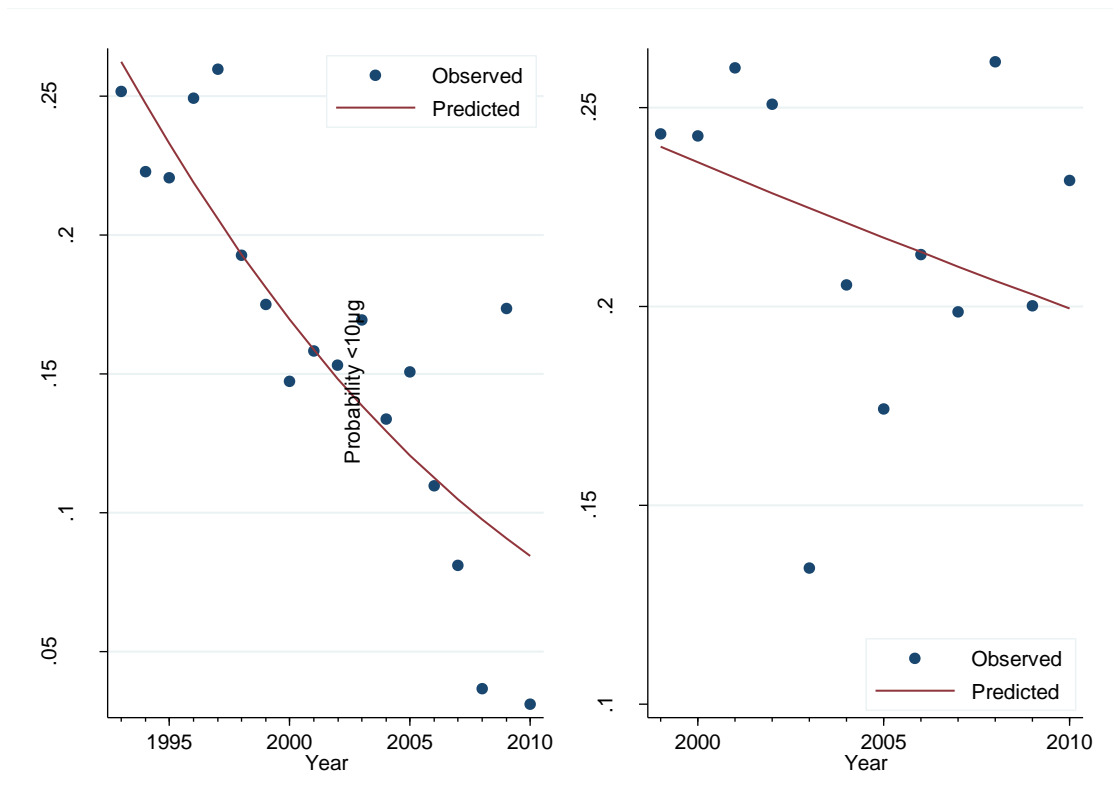


Figure 10 Probability of male blood-lead measurement by year [predicted by logistic regression]. The graph on the left is for the probability of a male blood-lead measurement $>40\mu\text{g}/100\text{ml}$. The graph on the right is for the probability of a male blood-lead measurement $<10\mu\text{g}/100\text{ml}$

Females under surveillance

- In 1992/93 there were 140 females under surveillance in the smelting, refining, alloying and casting sector; by 2009/10 this had fallen to 44 females
- The number of young females under surveillance has varied over the period with a high of 10 in 2000/01 and none between 2004/05 and 2009/10
- In 1992/93 there were 4 females (2.9% of female workers) with a recorded blood-lead level at or above 40µg/100ml; this reduced to none in 2009/10
- In 1996/97 (the first year in which lower blood-lead level data is available) there were 5 females (5.2% of female workers) with a recorded blood-lead level at or above 30µg/100ml; this reduced to none in 2009/10
- The number of female workers under medical surveillance who were suspended from working with lead has been low, with 7 suspensions over the 18 year period
- In 1992/93 the median female blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median female blood-lead level was under 20µg/100ml. Over the following 13 years the median female blood-lead level reduced to under 10µg/100ml in 2009/10
- The proportion of females recorded with a blood-lead level >25µg/100ml has decreased from 10.4% of female workers in 1996/97 to 0% of female workers since 2006/07. Each year, on average, the odds of having a recorded blood-lead measurement greater than 25µg/100ml decreased by 24% (Figure 11, left hand panel)
- The proportion of females recorded with a blood-lead level <10µg/100ml has increased from 56.0% of female workers in 1998/99 to 79.5% of female workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than 10µg/100ml increased by 24% (Figure 11, right hand panel)

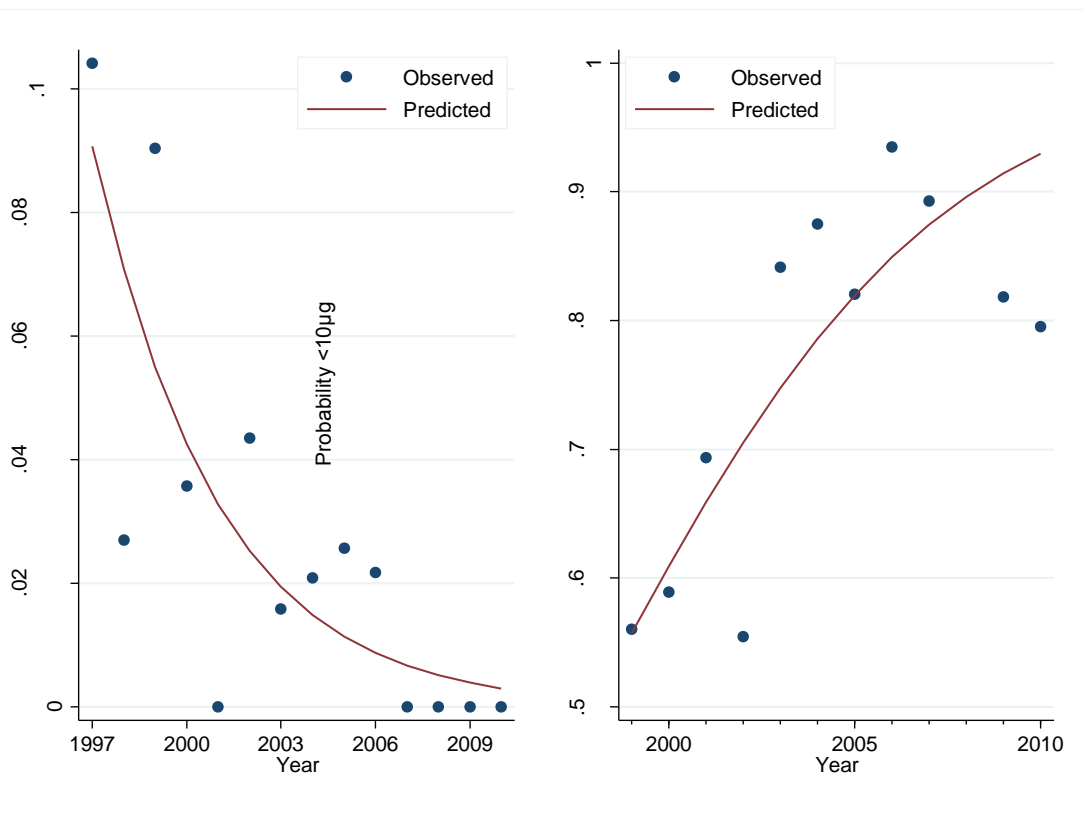


Figure 11 Probability of female blood-lead measurement by year [predicted by logistic regression]. The graph on the left is for the probability of a female blood-lead measurement >25µg/100ml. The graph on the right is for the probability of a female blood-lead measurement <10µg/100ml

Sector 02: Lead battery industry

The number of workers under medical surveillance in the lead battery industry fell by 66% from 3,862 in 1992/93 to 1,300 in 2009/10. The number of young people (under 18 years) under medical surveillance fluctuated between 0 and 5 individuals.

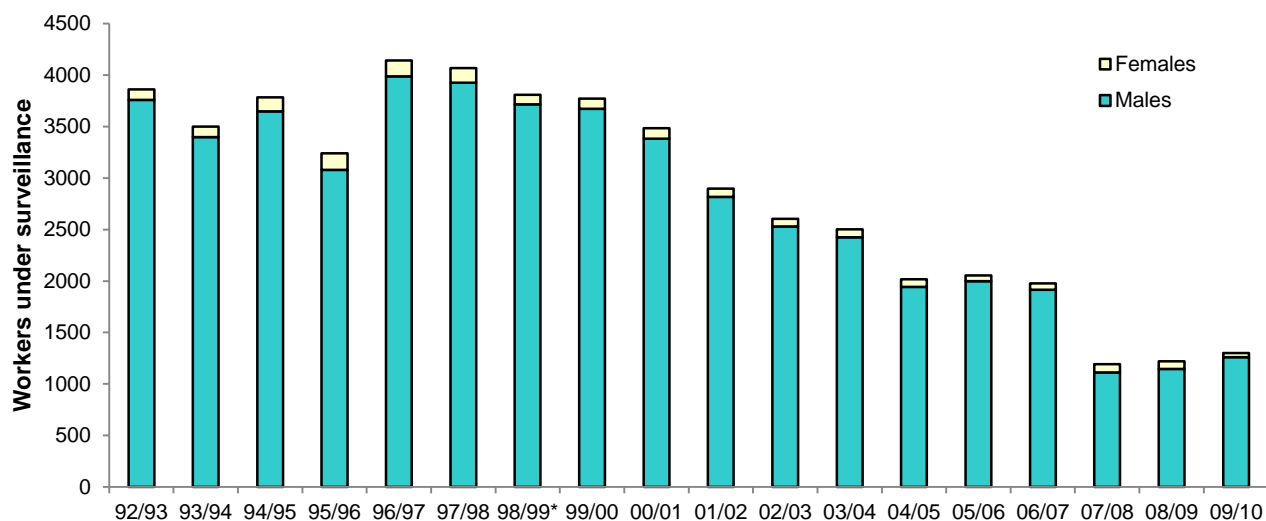


Figure 12 The total number of British lead workers under medical surveillance in the lead battery industry since 1992/93 by sex

Males under surveillance

- In 1992/93 there were 3,759 males under surveillance in the lead battery industry; by 2009/10 this had fallen to 1,261 males
- The number of young males under surveillance has varied from none to a high of 5 in 1999/2000
- In 1992/93 there were 78 males (2.1% of male workers) with a recorded blood-lead level at or above 70µg/100ml; this reduced to 2 males (0.2% of male workers) in 2009/10
- In 1992/93 there were 331 males (8.8% of male workers) with a recorded blood-lead level at or above 60µg/100ml; this reduced to 5 males (0.4% of male workers) in 2009/10
- Over the course of the regulations no young male has been recorded with high blood-lead levels (a blood-lead level at or above 50µg/100ml)
- The number of male workers under medical surveillance who were suspended from working with lead has steadily decreased from 36 in 1992/93 to 6 in 2009/10, after an increase corresponding to the reductions in the suspension/action levels in 1998/99
- In 1992/93 the median male blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median male blood-lead level was within the range 35-39µg/100ml. Over the following 13 years the median male blood-lead level reduced to within the range 20-24µg/100ml in 2009/10
- The proportion of males recorded with a blood-lead level >40µg/100ml has decreased from 44.3% of male workers in 1992/93 to 13.0% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement greater than 40µg/100ml decreased by 7% (Figure 13, left hand panel)
- The proportion of males recorded with a blood-lead level <10µg/100ml has increased from 8.1% of male workers in 1998/99 to 18.5% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than 10µg/100ml increased by 12% (Figure 13, right hand panel)

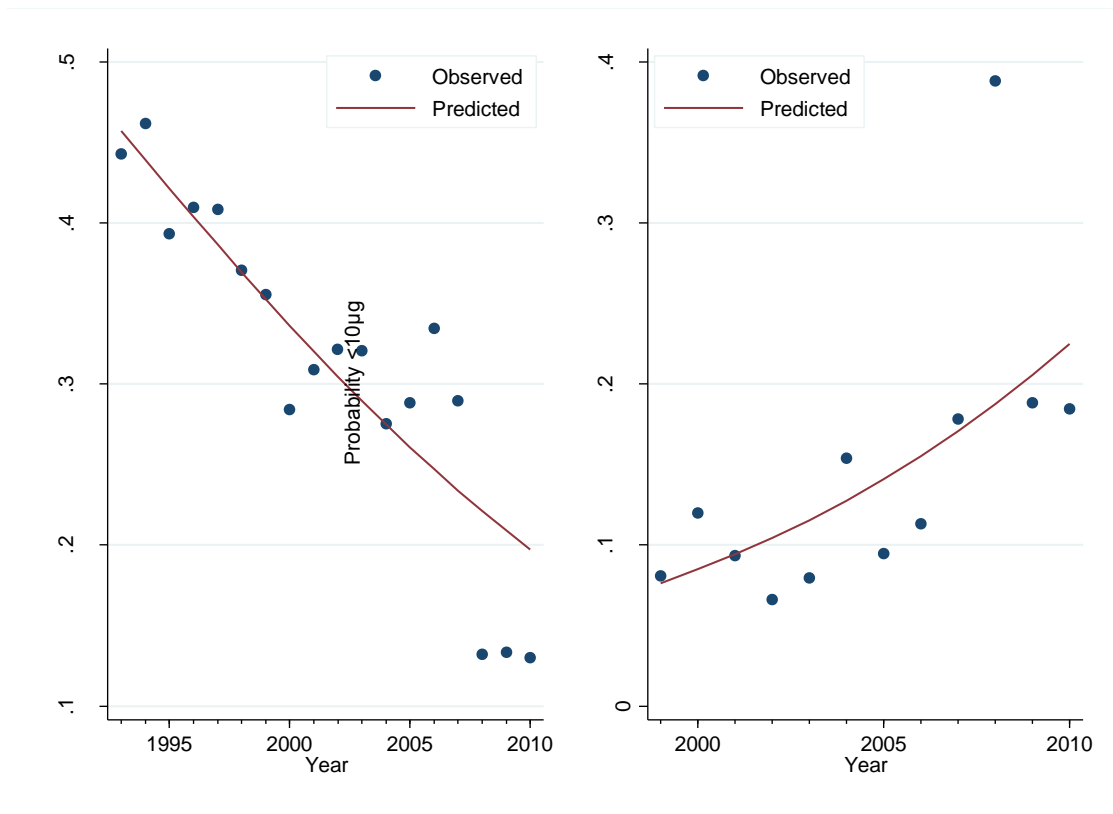


Figure 13 Probability of male blood-lead measurement by year [predicted by logistic regression]. The graph on the left is for the probability of a male blood-lead measurement >40µg/100ml. The graph on the right is for the probability of a male blood-lead measurement <10µg/100ml

Females under surveillance

- In 1992/93 there were 103 females under surveillance in the lead battery industry; by 2009/10 this had fallen to 39 females
- There were 2 young females under surveillance over the 18 year period in 2000/01
- In 1992/93 there were 22 females (21.4% of female workers) with a recorded blood-lead level at or above $40\mu\text{g}/100\text{ml}$; this reduced to none in 2009/10
- In 1996/97 (the first year in which lower blood-lead level data is available) there were 37 females (23.8% of female workers) with a recorded blood-lead level at or above $30\mu\text{g}/100\text{ml}$; this reduced to 3 females (7.8% of female workers) in 2009/10
- The number of female workers under medical surveillance who were suspended from working with lead has decreased from a high of 12 individuals in 1993/94 to none over the period 2006/07 to 2009/10
- In 1992/93 the median female blood-lead level was under $40\mu\text{g}/100\text{ml}$ (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median female blood-lead level was under $20\mu\text{g}/100\text{ml}$. Over the following 13 years the median female blood-lead level reduced to under $10\mu\text{g}/100\text{ml}$ in 2009/10
- The proportion of females recorded with a blood-lead level $>25\mu\text{g}/100\text{ml}$ has decreased from 33.6% of female workers in 1996/97 to 15.4% of female workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement greater than $25\mu\text{g}/100\text{ml}$ decreased by 9% (Figure 14, left hand panel)
- The proportion of females recorded with a blood-lead level $<10\mu\text{g}/100\text{ml}$ has increased from 13.7% of female workers in 1998/99 to 51.3% of female workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than $10\mu\text{g}/100\text{ml}$ increased by 23% (Figure 14, right hand panel)

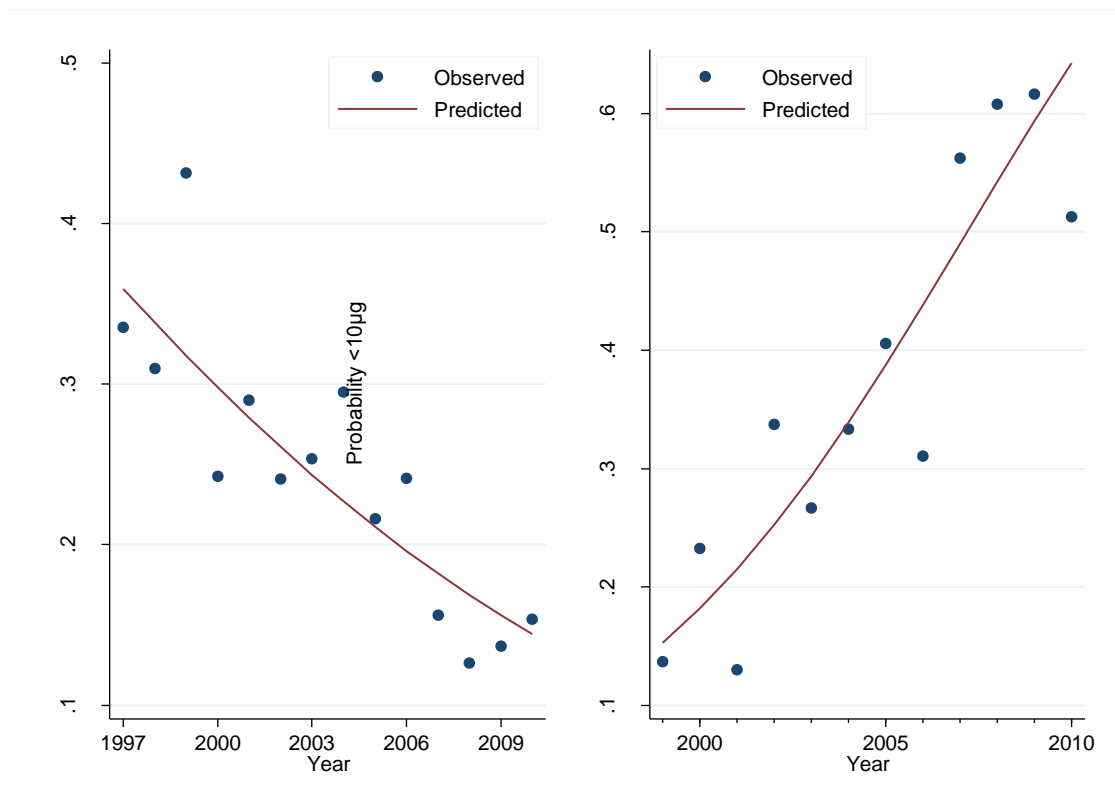


Figure 14 Probability of female blood-lead measurement by year [predicted by logistic regression]. The graph on the left is for the probability of a female blood-lead measurement $>25\mu\text{g}/100\text{ml}$. The graph on the right is for the probability of a female blood-lead measurement $<10\mu\text{g}/100\text{ml}$

Sector 03: Badge and jewellery enamelling

The number of workers under medical surveillance in the badge and jewellery enamelling sector has fallen from 149 in 1992/93 to none in 2009/10. There were 3 records for young people (under 18 years) under medical surveillance over the 18 year period.

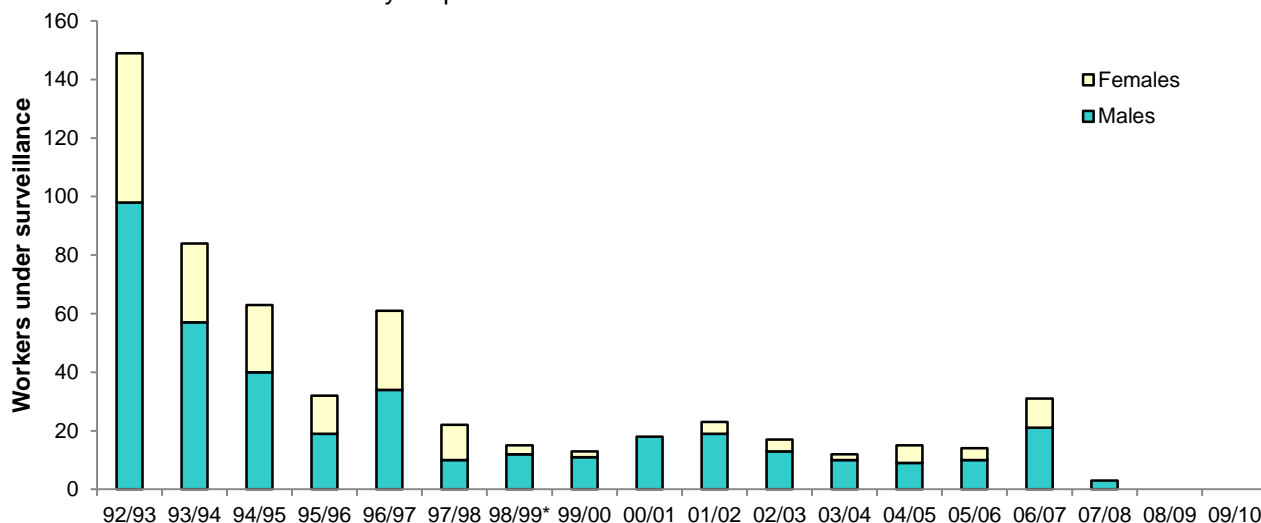


Figure 15 The total number of British lead workers under medical surveillance in the badge and jewellery enamelling sector since 1992/93 by sex

Males under surveillance

- In 1992/93 there were 98 males under surveillance in the badge and jewellery enamelling sector; by 2009/10 this had fallen to none
- There were 3 young males under surveillance from 1998/99 to 2009/10, one in each of the years 1999/2000, 2000/01 and 2001/02
- In 1992/93 there were no males with a recorded blood-lead level at or above 70µg/100ml; this remained through to 2007/08 (No males were under medical surveillance in this sector from 2008/09 to 2009/10)
- In 1992/93 there were 2 males (2.0% of male workers) with a recorded blood-lead level at or above 60µg/100ml; this reduced to no males the following year and remained through to 2007/08 (No males were under medical surveillance in this sector from 2008/09 to 2009/10)
- None of the young males were recorded with a high blood-lead levels (a blood-lead level at or above 50µg/100ml)
- No male workers under medical surveillance were suspended from working with lead over the 18 year period
- In 1992/93 the median male blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median male blood-lead level was within the range 25-29µg/100ml. Over the following 11 years the median male blood-lead level varied (typically under 30µg/100ml) due to the small numbers under surveillance (No males were under medical surveillance in this sector from 2008/09 to 2009/10)
- The proportion of males recorded with a blood-lead level >40µg/100ml has fluctuated over the period with 7.1% of male workers in 1992/93 and 66.7% of male workers in 2007/08 (No males were under medical surveillance in this sector from 2008/09 to 2009/10)
- The proportion of males recorded with a blood-lead level <10µg/100ml has fluctuated over the period with 8.3% of male workers in 1998/99 and 38.1% of male workers in 2006/07 (No males were under medical surveillance in this sector from 2008/09 to 2009/10)

Females under surveillance

- In 1992/93 there were 51 females under surveillance in the badge and jewellery enamelling sector; by 2009/10 this had fallen to none
- No young females have been under surveillance over the period
- In 1992/93 there were 5 females (9.8% of female workers) with a recorded blood-lead level at or above 40µg/100ml; this reduced to none from 1995/96
- Over the 14 year period in which lower blood-lead level data is available only one female had a recorded blood-lead level at or above 30µg/100ml; in 1997/98 (8.3% of female workers)
- There has been 1 female worker under medical surveillance who was suspended from working with lead in 1994/95
- In 1992/93 the median female blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median female blood-lead level was under 20µg/100ml. Over the following years the median female blood-lead level reduced to under 10µg/100ml in 2006/07 (No females were under medical surveillance in this sector from 2007/08 to 2009/10)
- There was only one year when any females were recorded with a blood-lead level >25µg/100ml, this was 1997/98 with 16.7% of female workers
- The proportion of females recorded with a blood-lead level <10µg/100ml was 70% of female workers in 2006/07 (No females were under medical surveillance in this sector from 2007/08 to 2009/10)

Sector 04: Glass making

The number of workers under medical surveillance in the glass making sector fell by 81% from 1,110 in 1992/93 to 208 in 2009/10. The number of young people (under 18 years) under medical surveillance has also decreased with 3 records for young people under medical surveillance over the period 2005/06 to 2009/10 compared with 23 individuals in 1998/99.

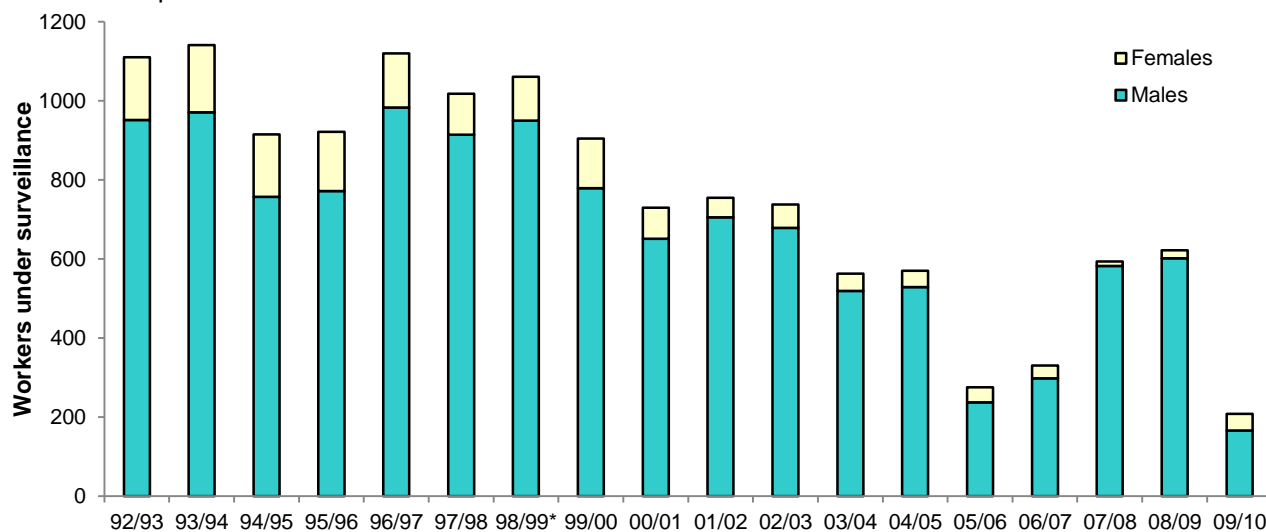


Figure 16 The total number of British lead workers under medical surveillance in the glass making sector since 1992/93 by sex

Males under surveillance

- In 1992/93 there were 952 males under surveillance in the glass making sector; by 2009/10 this had fallen to 166 males
- The number of young males under surveillance has decreased from 21 in 1998/99 to none between 2006/07 and 2009/10
- In 1992/93 there were 6 males (0.6% of male workers) with a recorded blood-lead level at or above 70µg/100ml; this reduced to none in 2009/10
- In 1992/93 there were 37 males (3.9% of male workers) with a recorded blood-lead level at or above 60µg/100ml; this reduced to none in 2009/10
- Over the course of the regulations no young males have been recorded with high blood-lead levels (a blood-lead level at or above 50µg/100ml)
- The number of male workers under medical surveillance who were suspended from working with lead has decreased from a high of 5 in 1993/94 to none since 2002/03
- In 1992/93 the median male blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median male blood-lead level was within the range 20-24µg/100ml. This remains unchanged in 2009/10
- The proportion of males recorded with a blood-lead level >40µg/100ml has decreased from 29.5% of male workers in 1992/93 to 7.2% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement greater than 40µg/100ml decreased by 7% (Figure 17)
- The proportion of males recorded with a blood-lead level <10µg/100ml has increased from 16.1% of male workers in 1998/99 to 22.9% of male workers in 2009/10

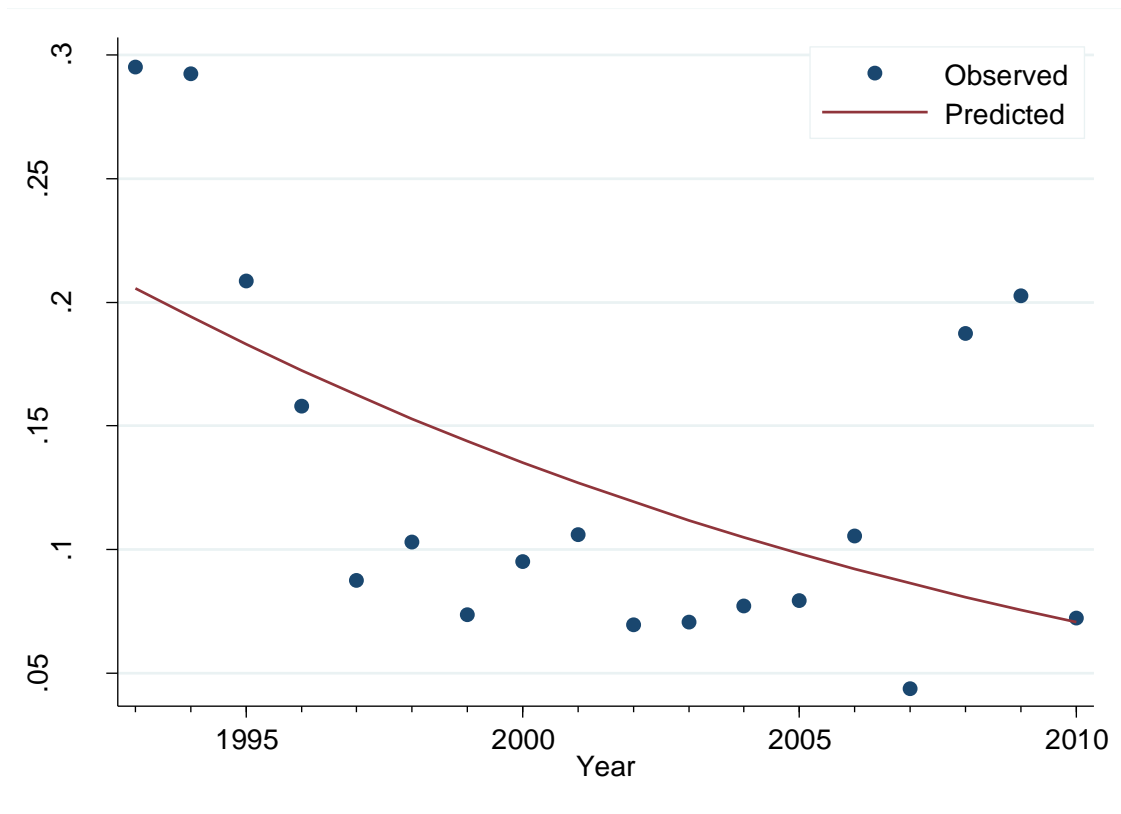


Figure 17 Probability of a male blood-lead measurement $>40\mu\text{g}/100\text{ml}$ by year [predicted by logistic regression]

Females under surveillance

- In 1992/93 there were 158 females under surveillance in the glass making sector; by 2009/10 this had fallen to 42 females
- The number of young females under surveillance has varied over the period with a high of 6 in 1999/2000 and 2 between 2004/05 and 2009/10
- In 1992/93 there were 4 females (2.5% of female workers) with a recorded blood-lead level at or above $40\mu\text{g}/100\text{ml}$; this reduced to none in 2009/10
- In 1996/97 (the first year in which lower blood-lead level data is available) there were 5 females (3.6% of female workers) with a recorded blood-lead level at or above $30\mu\text{g}/100\text{ml}$; this reduced to none in 2009/10
- The number of female workers under medical surveillance who were suspended from working with lead has been low, with 8 suspensions over the 18 year period
- In 1992/93 the median female blood-lead level was under $40\mu\text{g}/100\text{ml}$ (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median female blood-lead level was under $20\mu\text{g}/100\text{ml}$. Over the following 13 years the median female blood-lead level reduced to under $10\mu\text{g}/100\text{ml}$ in 2009/10
- The proportion of females recorded with a blood-lead level $>25\mu\text{g}/100\text{ml}$ has decreased from 10.9% of female workers in 1996/97 to 0% of female workers in 2008/09 and 2009/10
- The proportion of females recorded with a blood-lead level $<10\mu\text{g}/100\text{ml}$ has increased from 38.7% of female workers in 1998/99 to 73.8% of female workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than $10\mu\text{g}/100\text{ml}$ increased by 13% (Figure 18)

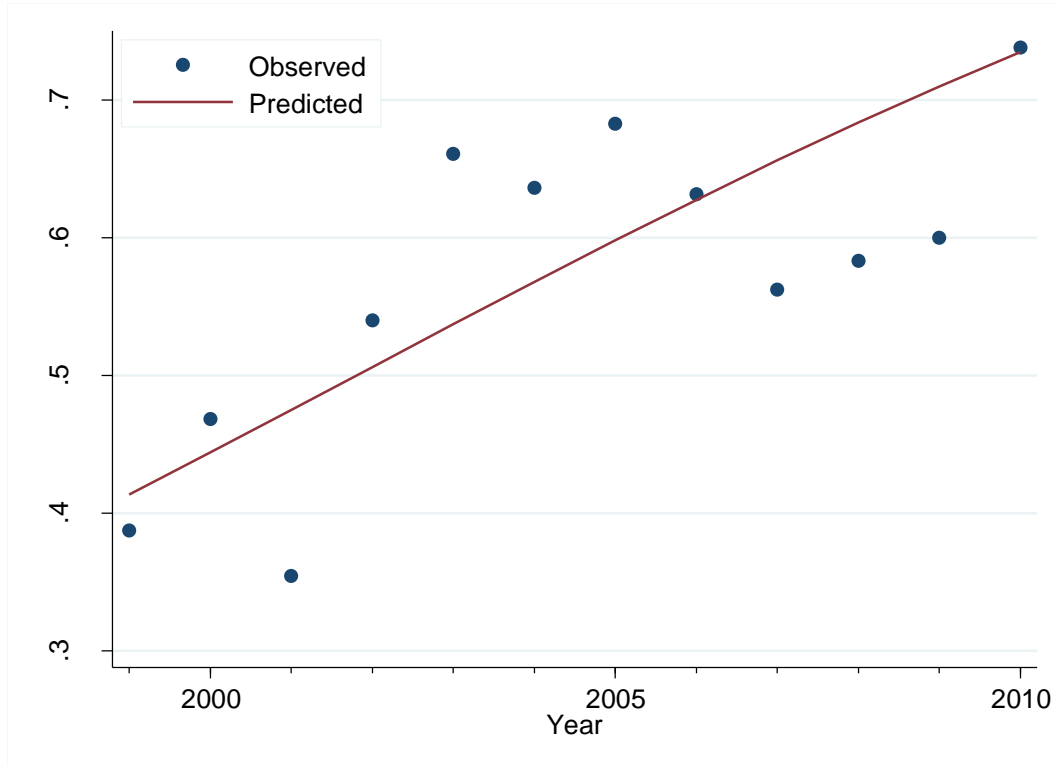


Figure 18 Probability of a female blood-lead measurement $<10\mu\text{g}/100\text{ml}$ by year [predicted by logistic regression]

Sector 05: Manufacture of pigments and colours

The number of workers under medical surveillance in the manufacture of pigments and colours sector fell by 84% from 636 in 1992/93 to 100 in 2009/10. There were 6 records for young people (under 18 years) under medical surveillance over the 18 year period.

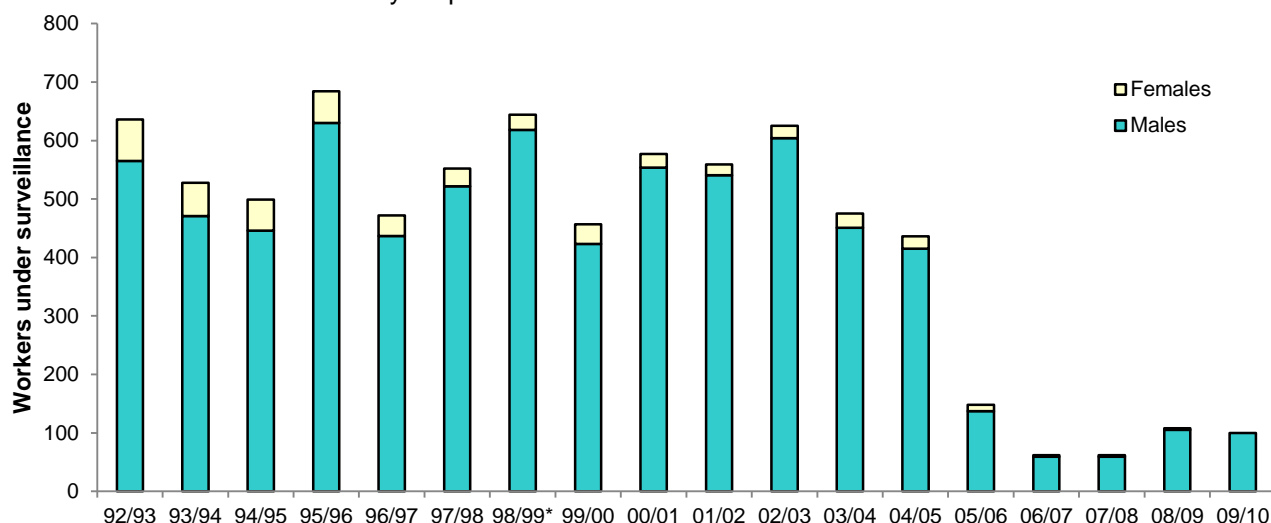


Figure 19 The total number of British lead workers under medical surveillance in the manufacture of pigments and colours sector since 1992/93 by sex

Males under surveillance

- In 1992/93 there were 565 males under surveillance in the manufacture of pigments and colours sector; by 2009/10 this had fallen to 100 males
- There were 4 young males under surveillance; 3 in 1998/99 and another in 1999/2000
- In 1992/93 there were 2 males (0.4% of male workers) with a recorded blood-lead level at or above 70µg/100ml; this reduced to none in 2009/10
- In 1992/93 there were 9 males (1.6% of male workers) with a recorded blood-lead level at or above 60µg/100ml; this reduced to none in 2009/10
- No young male has been recorded with high blood-lead levels (a blood-lead level at or above 50µg/100ml)
- The number of male workers under medical surveillance who were suspended from working with lead has fluctuated between 0 and 2 over the 18 year period
- In 1992/93 the median male blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median male blood-lead level was under 20µg/100ml. Over the following 13 years the median male blood-lead level remained below 20µg/100ml and was within the range 10-19µg/100ml in 2009/10
- The proportion of males recorded with a blood-lead level >40µg/100ml has decreased from 8.3% of male workers in 1992/93 to 6.0% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement greater than 40µg/100ml decreased by 5% (Figure 20, left hand panel)
- The proportion of males recorded with a blood-lead level <10µg/100ml has decreased from 52.3% of male workers in 1998/99 to 24.0% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than 10µg/100ml decreased by 5% (Figure 20, right hand panel)

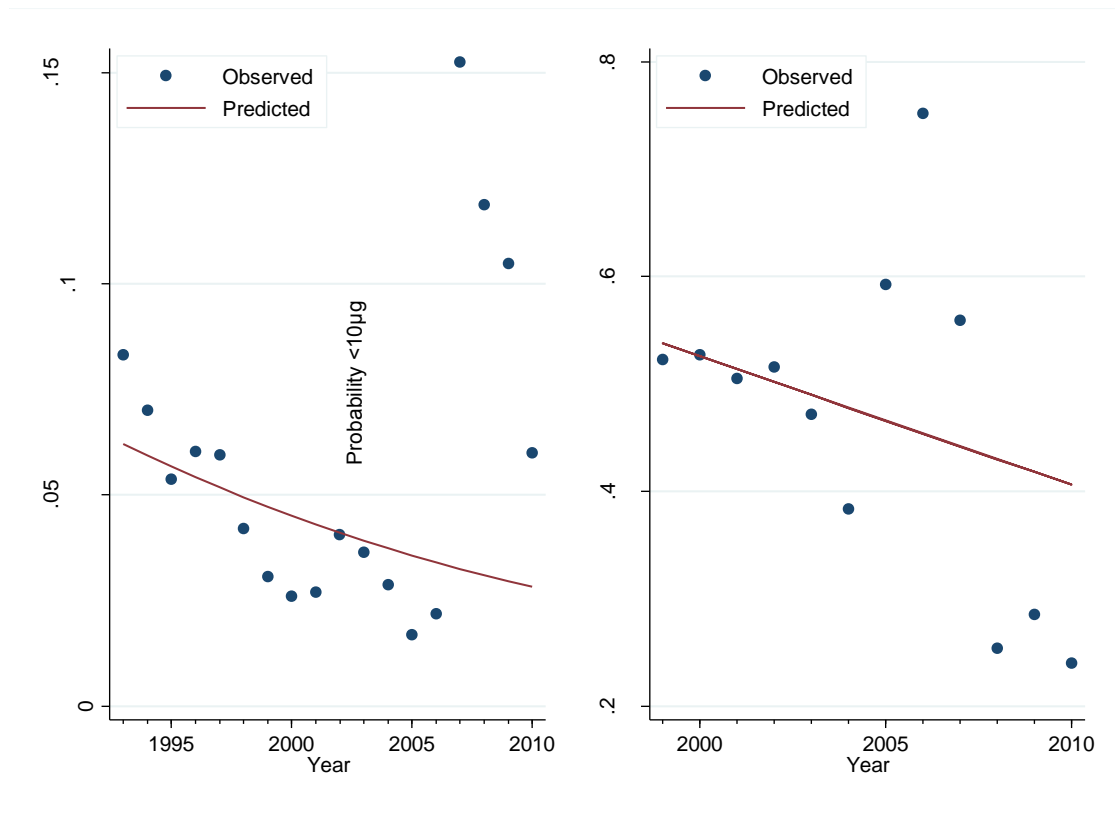


Figure 20 Probability of male blood-lead measurement by year [predicted by logistic regression]. The graph on the left is for the probability of a male blood-lead measurement $>40\mu\text{g}/100\text{ml}$. The graph on the right is for the probability of a male blood-lead measurement $<10\mu\text{g}/100\text{ml}$

Females under surveillance

- In 1992/93 there were 71 females under surveillance in the manufacture of pigments and colours sector; by 2009/10 this had fallen to none
- There were 2 young females under surveillance in 2006/07
- Over the 18 year period there was 1 female with a recorded blood-lead level at or above $40\mu\text{g}/100\text{ml}$; in 1998/99 (3.8% of female workers)
- Over the 14 year period in which lower blood-lead level data is available there were 2 females with a recorded blood-lead level at or above $30\mu\text{g}/100\text{ml}$; one in each of 1997/98 (3.3% of female workers) and 1998/99 (3.8% of female workers)
- There was 1 female worker under medical surveillance who was suspended from working with lead in 1998/99
- In 1992/93 the median female blood-lead level was under $40\mu\text{g}/100\text{ml}$ (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median female blood-lead level was under $20\mu\text{g}/100\text{ml}$. Over the following 12 years the median female blood-lead level reduced to under $25\mu\text{g}/100\text{ml}$ in 2008/09 (No females were under medical surveillance in this sector in 2009/10)
- The proportion of females recorded with a blood-lead level $>25\mu\text{g}/100\text{ml}$ has decreased from 5.7% of female workers in 1996/97 to 0% of female workers since 2004/05
- The proportion of females recorded with a blood-lead level $<10\mu\text{g}/100\text{ml}$ has fluctuated over the period with 76.9% of female workers in 1998/99 and 85.7% of female workers in 2004/05 (No females were under medical surveillance in this sector in 2009/10)

Sector 06: Potteries, glazes and transfers

The number of workers under medical surveillance in the potteries, glazes and transfers sector fell by 94% from 465 in 1992/93 to 26 in 2009/10. The number of young people (under 18 years) under medical surveillance has been low; with 4 individuals under surveillance in 2000/01 and none since 2004/05.

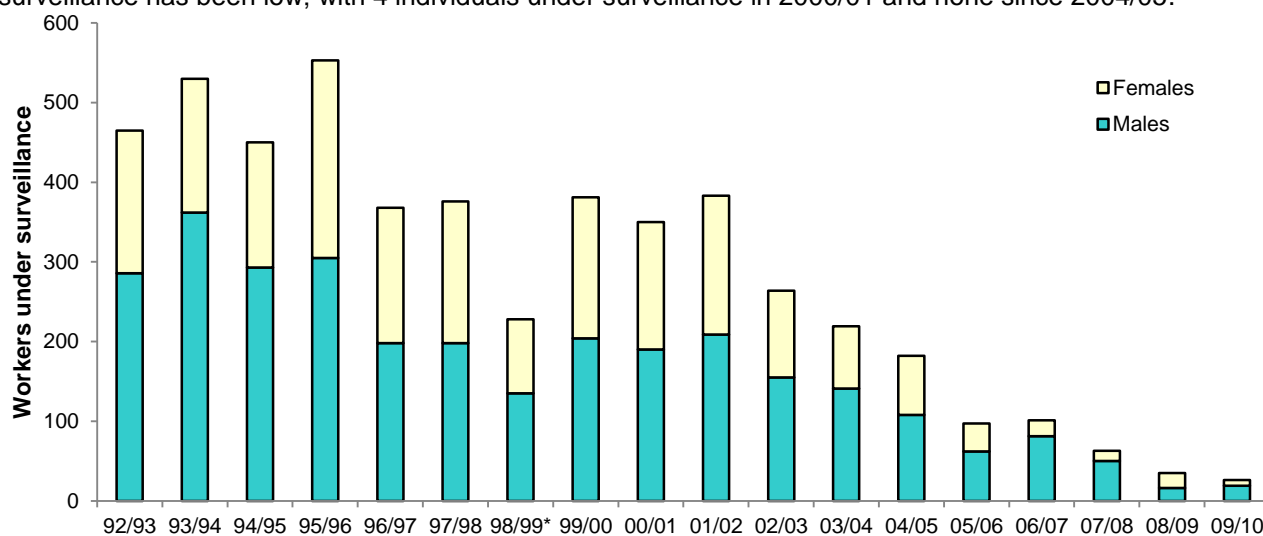


Figure 21 The total number of British lead workers under medical surveillance in the potteries, glazes and transfers sector since 1992/93 by sex

Males under surveillance

- In 1992/93 there were 286 males under surveillance in the potteries, glazes and transfers sector; by 2009/10 this had fallen to 19 males
- There were 5 records of young males under surveillance, 2 in 1999/2000 and 2000/01 and another in 2002/03
- In each of 1993/94, 1997/98, 2002/03 and 2003/04, there was 1 male with a recorded blood-lead level at or above 70µg/100ml
- In 1992/93 there were 4 males (1.4% of male workers) with a recorded blood-lead level at or above 60µg/100ml; this reduced to none in 2009/10
- No young males have been recorded with high blood-lead levels (a blood-lead level at or above 50µg/100ml)
- There were 9 male workers under medical surveillance who were suspended from working with lead over the 18 year period
- In 1992/93 the median male blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median male blood-lead level was under 20µg/100ml. Over the following 13 years the median male blood-lead level was relatively stable and was within the range 10-19µg/100ml in 2009/10
- The proportion of males recorded with a blood-lead level >40µg/100ml has decreased from 12.9% of male workers in 1992/93 to 0% of male workers in 2008/09 and 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement greater than 40µg/100ml decreased by 13% (Figure 22, left hand panel)
- The proportion of males recorded with a blood-lead level <10µg/100ml has increased from 18.5% of male workers in 1998/99 to 54.0% of male workers in 2007/08 then decreased to 10.5% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than 10µg/100ml increased by 10% (Figure 22, right hand panel)

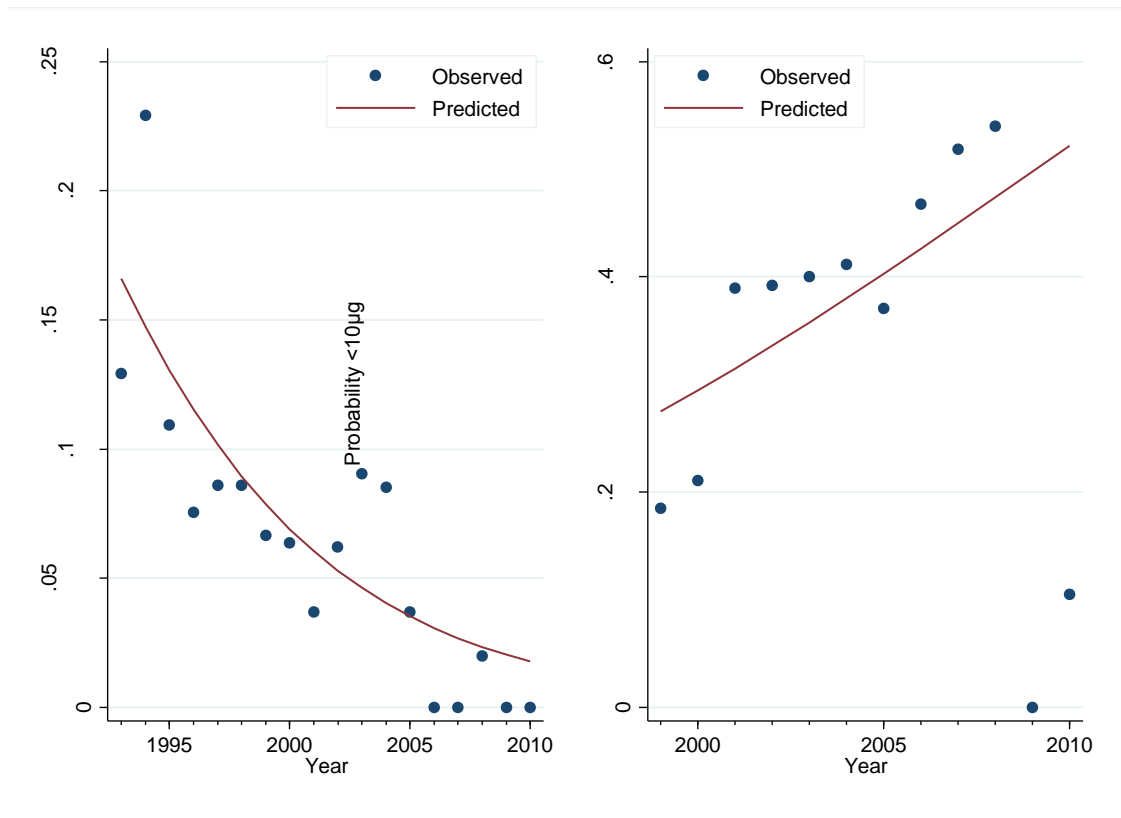


Figure 22 Probability of male blood-lead measurement by year [predicted by logistic regression]. The graph on the left is for the probability of a male blood-lead measurement >40µg/100ml. The graph on the right is for the probability of a male blood-lead measurement <10µg/100ml

Females under surveillance

- In 1992/93 there were 179 females under surveillance in the potteries, glazes and transfers sector; by 2009/10 this had fallen to 7 females
- There were 5 records of young females under surveillance, 2 in 2000/01 and 2003/04 and another in 1998/99
- In 1992/93 there were 5 females (2.8% of female workers) with a recorded blood-lead level at or above $40\mu\text{g}/100\text{ml}$; this reduced to none in 2009/10
- In 1996/97 (the first year in which lower blood-lead level data is available) there were 6 females (3.5% of female workers) with a recorded blood-lead level at or above $30\mu\text{g}/100\text{ml}$; this reduced to none in 2009/10
- The number of female workers under medical surveillance who were suspended from working with lead has been low, with 6 suspensions over the 18 year period
- In 1992/93 the median female blood-lead level was under $40\mu\text{g}/100\text{ml}$ (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median female blood-lead level was under $20\mu\text{g}/100\text{ml}$. Over the following 13 years the median female blood-lead level reduced to under $10\mu\text{g}/100\text{ml}$ in 2009/10
- The proportion of females recorded with a blood-lead level $>25\mu\text{g}/100\text{ml}$ has decreased from 8.2% of female workers in 1996/97 to 0% of female workers since 2006/07
- The proportion of females recorded with a blood-lead level $<10\mu\text{g}/100\text{ml}$ has increased from 53.8% of female workers in 1998/99 to 85.7% of female workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than $10\mu\text{g}/100\text{ml}$ increased by 18% (Figure 23)

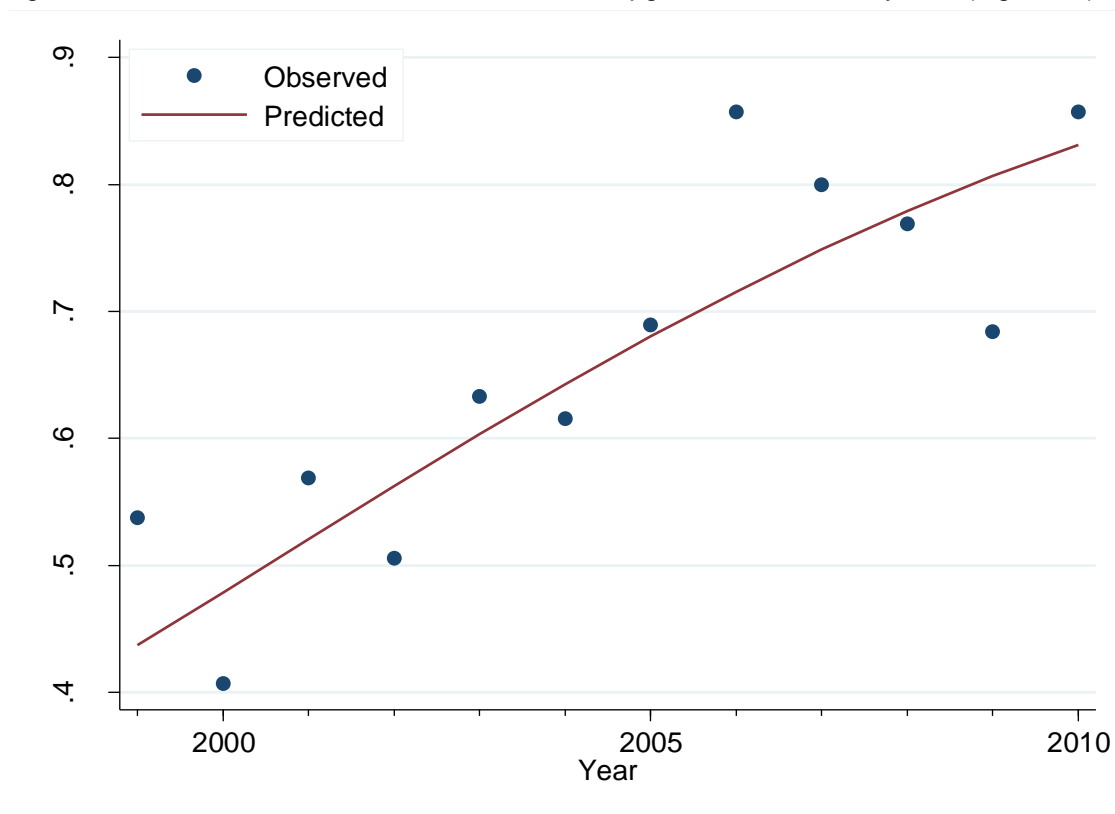


Figure 23 Probability of a female blood-lead measurement $<10\mu\text{g}/100\text{ml}$ by year [predicted by logistic regression]

Sector 07: Manufacture of inorganic and organic compounds

The number of workers under medical surveillance in the manufacture of inorganic and organic compounds sector fell by 90% from 2,620 in 1992/93 to 270 in 2009/10. There were 3 young people (under 18 years) under medical surveillance in 2000/01.

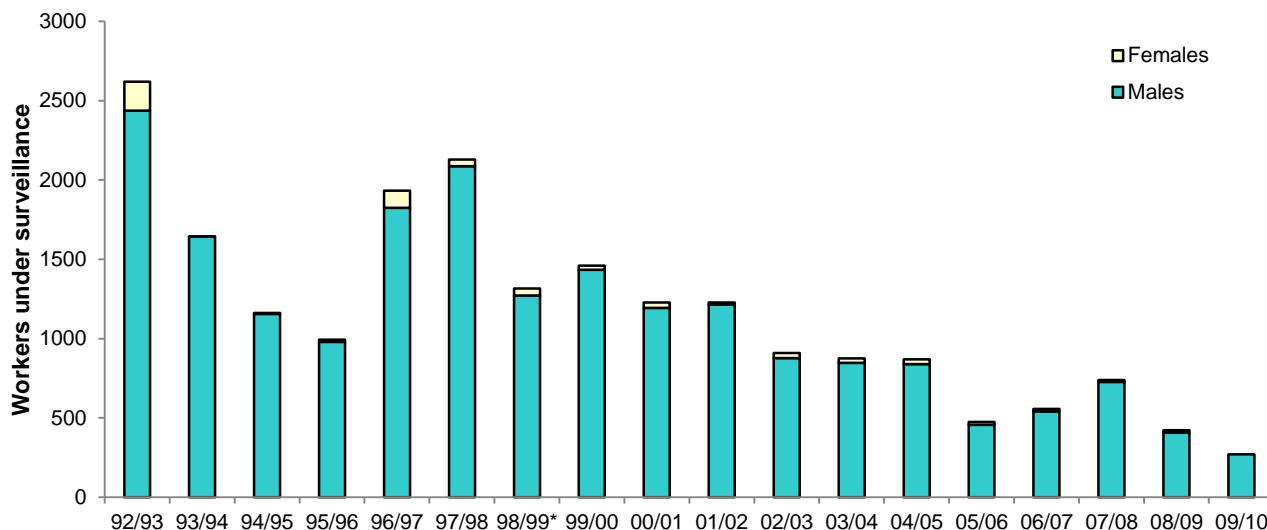


Figure 24 The total number of British lead workers under medical surveillance in the manufacture of inorganic and organic compounds sector since 1992/93 by sex

Males under surveillance

- In 1992/93 there were 2,438 males under surveillance in the manufacture of inorganic and organic compounds sector; by 2009/10 this had fallen to 270 males
- There were 3 young males under surveillance in 2000/01
- In 1992/93 there was 1 male (0.1% of male workers) with a recorded blood-lead level at or above 70µg/100ml; this reduced to none in 2009/10
- In 1992/93 there were 16 males (0.6% of male workers) with a recorded blood-lead level at or above 60µg/100ml; this reduced to none in 2009/10
- No young males have been recorded with high blood-lead levels (a blood-lead level at or above 50µg/100ml)
- The number of male workers under medical surveillance who were suspended from working with lead has fluctuated between none and 6 over the 18 year period
- In 1992/93 the median male blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median male blood-lead level was under 20µg/100ml. Over the following 13 years the median male blood-lead level reduced to under 10µg/100ml in 2009/10
- The proportion of males recorded with a blood-lead level >40µg/100ml has increased from 4.3% of male workers in 1992/93 to 9.9% of male workers in 2002/03, then decreased to 3.3% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement greater than 40µg/100ml increased by 5% (Figure 25)
- The proportion of males recorded with a blood-lead level <10µg/100ml has increased from 30.1% of male workers in 1998/99 to 54.1% of male workers in 2009/10

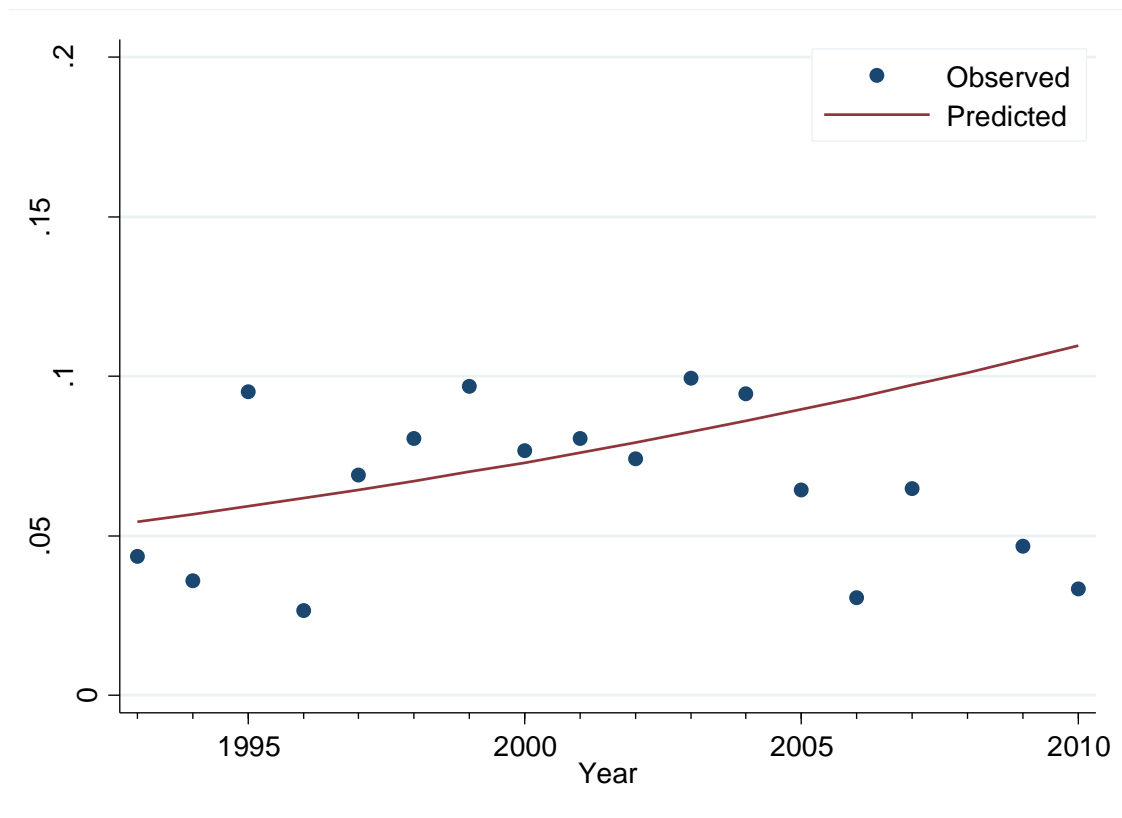


Figure 25 Probability of a male blood-lead measurement >40µg/100ml by year [predicted by logistic regression]

Females under surveillance

- In 1992/93 there were 182 females under surveillance in the manufacture of inorganic and organic compounds sector; by 2009/10 this had fallen to no females
- No young females were under medical surveillance over the 18 year period
- Over the 18 year period there was 1 female with a recorded blood-lead level at or above 40µg/100ml; in 1999/00 (3.8% of female workers)
- Over the 14 year period in which lower blood-lead level data is available there were 3 females with a recorded blood-lead level at or above 30µg/100ml; 1 in each of 1999/00 (3.8% of female workers), 2001/02 (6.7% of female workers) and 2002/03 (3.0% of female workers)
- There were 2 records of female workers under medical surveillance who were suspended from working with lead; one in 2001/02 and another in 2002/03
- In 1992/93 the median female blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median female blood-lead level was under 20µg/100ml. Over the following 13 years the median female blood-lead level reduced to under 10µg/100ml in 2008/09 (No females were under medical surveillance in this sector in 2009/10)
- The proportion of females recorded with a blood-lead level >25µg/100ml has decreased from 0.9% of female workers in 1996/97 to 0% of female workers since 2006/07
- The proportion of females recorded with a blood-lead level <10µg/100ml has increased from 75.0% of female workers in 1998/99 to 87.5% of female workers in 2008/09 (No females were under medical surveillance in this sector in 2009/10)

Sector 08: Shipbuilding, repairing and breaking

The number of workers under medical surveillance in the shipbuilding, repairing and breaking sector remained relatively stable (at between 100 and 150 individuals) up to 1998/99 then rose in 1999/2000 and 2003/04, before falling back to its previous level in 2009/10. There were 3 young people (under 18 years) under medical surveillance in 2003/04.

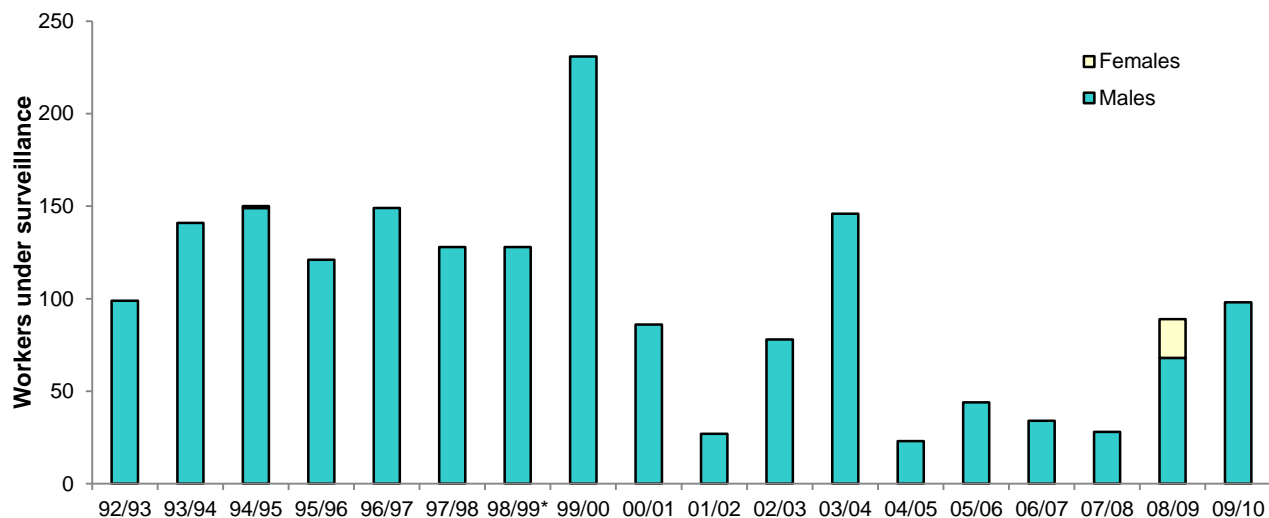


Figure 26 The total number of British lead workers under medical surveillance in the shipbuilding, repairing and breaking sector since 1992/93 by sex

Males under surveillance

- In 1992/93 there were 99 males under surveillance in the shipbuilding, repairing and breaking sector; by 2009/10 this level had remained with 98 males under surveillance; after an increase to a high of 231 in 1999/2000 and a decrease to a low of 23 in 2004/05
- There were 3 young males under surveillance in 2003/04
- Over the 18 year period there was 1 male with a recorded blood-lead level at or above 70µg/100ml; in 2003/04 (0.7% of male workers)
- In 1992/93 there was 1 male (1.0% of male workers) with a recorded blood-lead level at or above 60µg/100ml; this reduced to no males in 2009/10
- None of the young males were recorded with a high blood-lead level (a blood-lead level at or above 50µg/100ml)
- Over the 18 year period there were 5 records of male workers under medical surveillance who were suspended from working with lead
- In 1992/93 the median male blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median male blood-lead level was under 20µg/100ml. Over the following 13 years the median male blood-lead level reduced to under 10µg/100ml in 2009/10
- The proportion of males recorded with a blood-lead level >40µg/100ml has decreased from 5.1% of male workers in 1992/93 to 0% of male workers in 2009/10
- The proportion of males recorded with a blood-lead level <10µg/100ml has increased from 43.8% of male workers in 1998/99 to 94.9% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than 10µg/100ml increased by 19% (Figure 27)

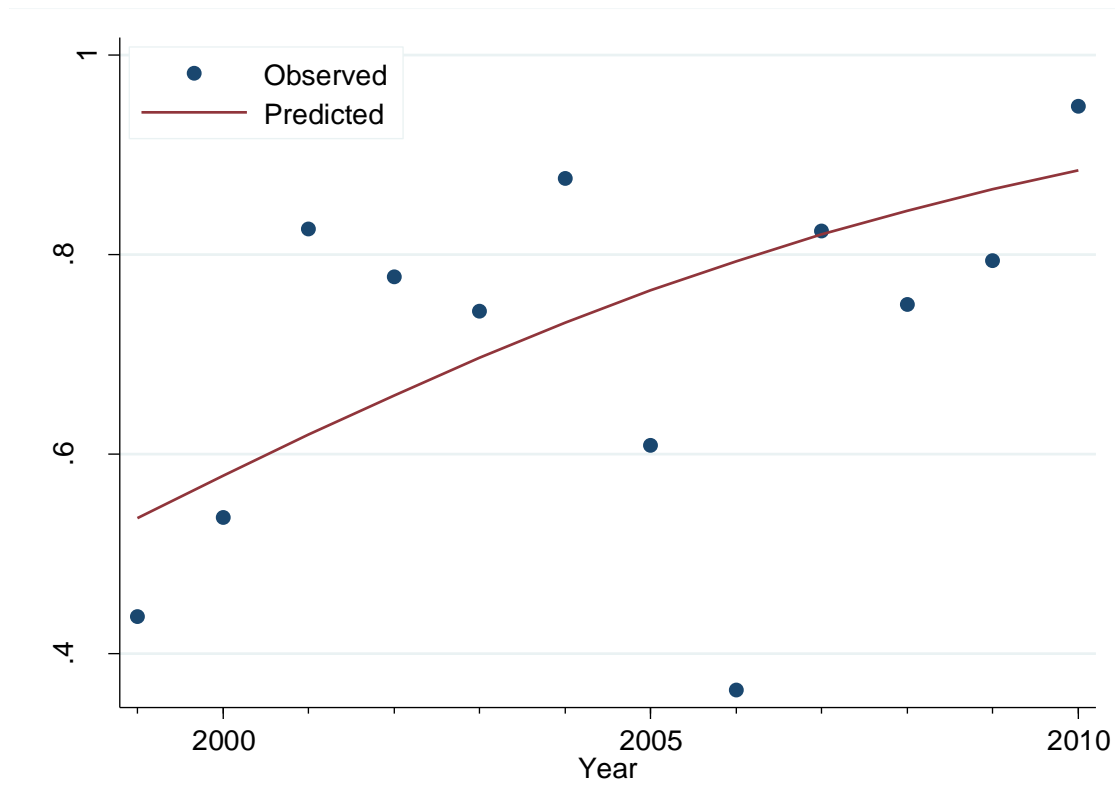


Figure 27 Probability of a male blood-lead measurement $<10\mu\text{g}/100\text{ml}$ by year [predicted by logistic regression]

Females under surveillance

- In two years females have been under surveillance in the shipbuilding, repairing and breaking sector; 1 female in 1994/95 and 21 females in 2008/09
- No young females were under surveillance between 1998/99 and 2009/10
- Over the 18 year period there were no females with a recorded blood-lead level at or above $40\mu\text{g}/100\text{ml}$
- Over the 14 year period in which lower blood-lead level data is available there were no females with a recorded blood-lead level at or above $30\mu\text{g}/100\text{ml}$
- No female workers under medical surveillance were suspended from working with lead over the 18 year period
- In 1994/95 the median female blood-lead level was under $40\mu\text{g}/100\text{ml}$ (no data are available to narrow this down to a range). In 2008/09 the median female blood-lead level was under $10\mu\text{g}/100\text{ml}$
- Over the 14 year period from 1996/97 no females were recorded with a blood-lead level $>25\mu\text{g}/100\text{ml}$
- There was only one year when any females were recorded with a blood-lead level $<10\mu\text{g}/100\text{ml}$, this was 2008/09 with 76.2% of female workers

Sector 09: Demolition industry

The number of workers under medical surveillance in the demolition sector fell by 50% from 651 in 1992/93 to 328 in 2009/10. No young people (under 18 years) were under medical surveillance over the 18 year period.

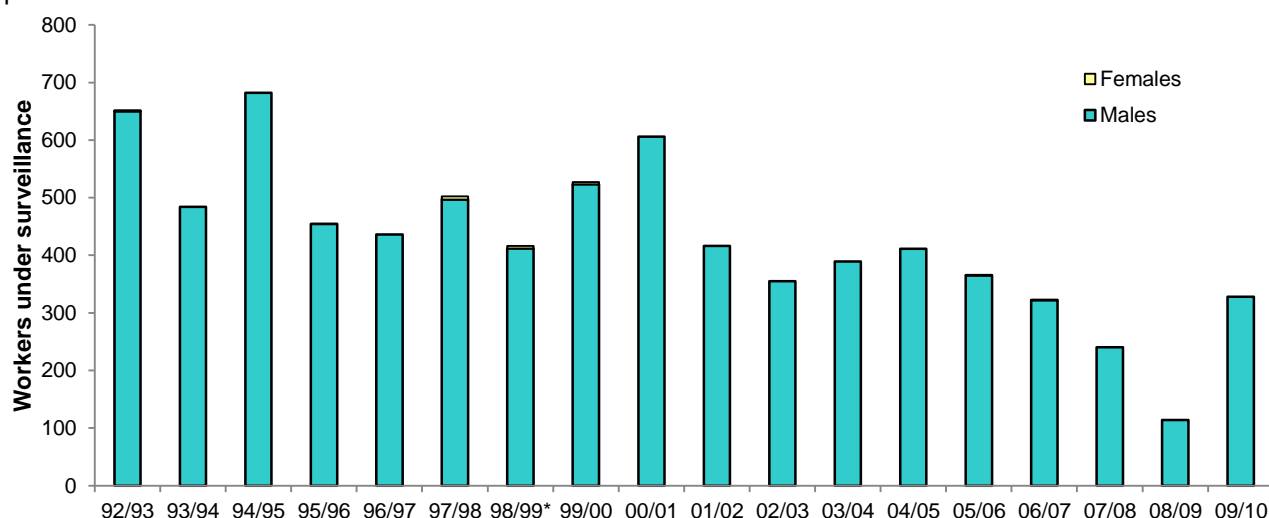


Figure 28 The total number of British lead workers under medical surveillance in the demolition sector since 1992/93 by sex

Males under surveillance

- In 1992/93 there were 650 males under surveillance in the demolition sector; by 2009/10 this had fallen to 328 males
- No young males have been under surveillance in the demolition sector
- In 1992/93 there were 18 males (2.8% of male workers) with a recorded blood-lead level at or above 70µg/100ml; this reduced to 1 in 2009/10 (0.3% of male workers)
- In 1992/93 there were 39 males (6.0% of male workers) with a recorded blood-lead level at or above 60µg/100ml; this reduced to 1 male (0.3% of male workers) in 2009/10
- The number of male workers under medical surveillance who were suspended from working with lead has steadily reduced from 16 in 1992/93 to none in 2009/10; after an increase to 29 in 1995/96
- In 1992/93 the median male blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median male blood-lead level was within the range 25-29µg/100ml. Over the following 13 years the median male blood-lead level reduced to within the range 10-19µg/100ml in 2009/10
- The proportion of males recorded with a blood-lead level >40µg/100ml has decreased from 24.2% of male workers in 1992/93 to 2.7% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement greater than 40µg/100ml decreased by 13% (Figure 29, left hand panel)
- The proportion of males recorded with a blood-lead level <10µg/100ml has increased from 41.3% of male workers in 1998/99 to 61.4% of male workers in 2008/09 and decreased to 39.0% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than 10µg/100ml increased by 8% (Figure 29, right hand panel)

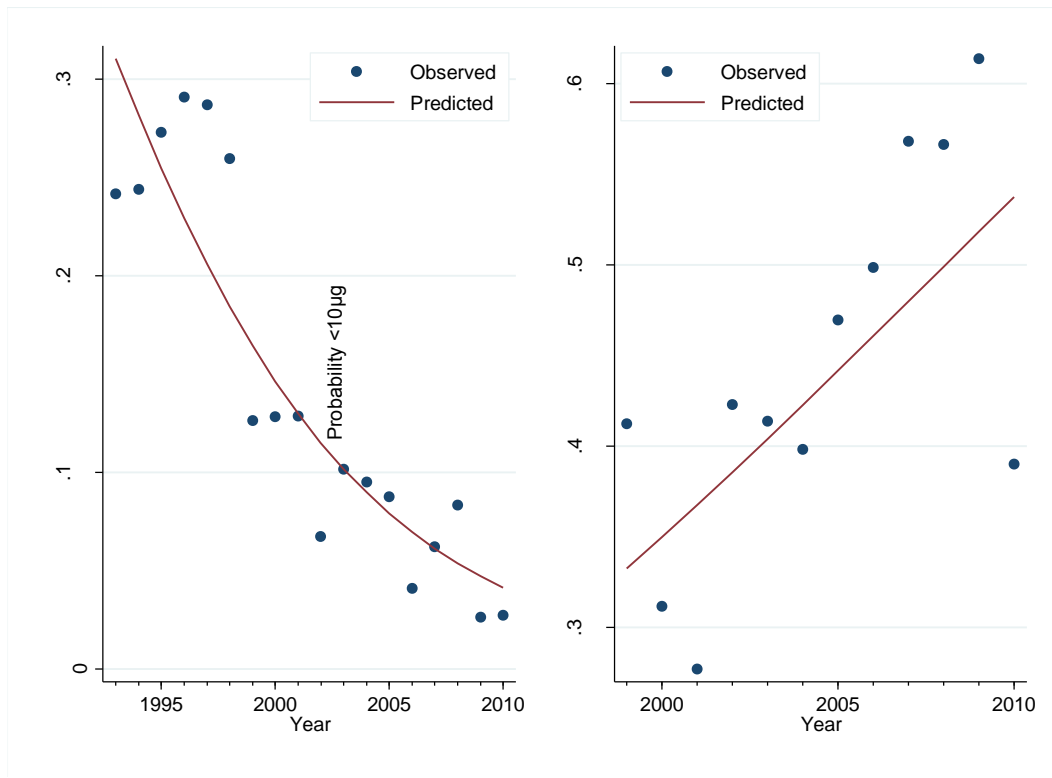


Figure 29 Probability of male blood-lead measurement by year [predicted by logistic regression]. The graph on the left is for the probability of a male blood-lead measurement $>40\mu\text{g}/100\text{ml}$. The graph on the right is for the probability of a male blood-lead measurement $<10\mu\text{g}/100\text{ml}$

Females under surveillance

- In 1992/93 there was 1 female under surveillance in the demolition sector; by 1997/98 this had risen to 5 females. There were no females under surveillance from 2007/08 to 2009/10
- No young females were under surveillance between 1998/99 and 2009/10
- Over the 18 year period there were no females with a recorded blood-lead level at or above $40\mu\text{g}/100\text{ml}$
- Over the 14 year period in which lower blood-lead level data is available there were no females with a recorded blood-lead level at or above $30\mu\text{g}/100\text{ml}$
- No female workers under medical surveillance were suspended from working with lead over the 18 year period
- In 1992/93 the median female blood-lead level was under $40\mu\text{g}/100\text{ml}$ (no data are available to narrow this down to a range). In 2006/07 the median female blood-lead level had fallen to under $25\mu\text{g}/100\text{ml}$ (No females were under medical surveillance in this sector from 2007/08 to 2009/10)
- Over the 14 year period from 1996/97 all females were recorded with a blood-lead level $<25\mu\text{g}/100\text{ml}$

Sector 10: Painting of buildings and vehicles

The number of workers under medical surveillance in the painting of building and vehicles sector fell by 61% from 895 in 1992/93 to 350 in 2009/10. There were 6 records for young people (under 18 years) under medical surveillance since 1998/99

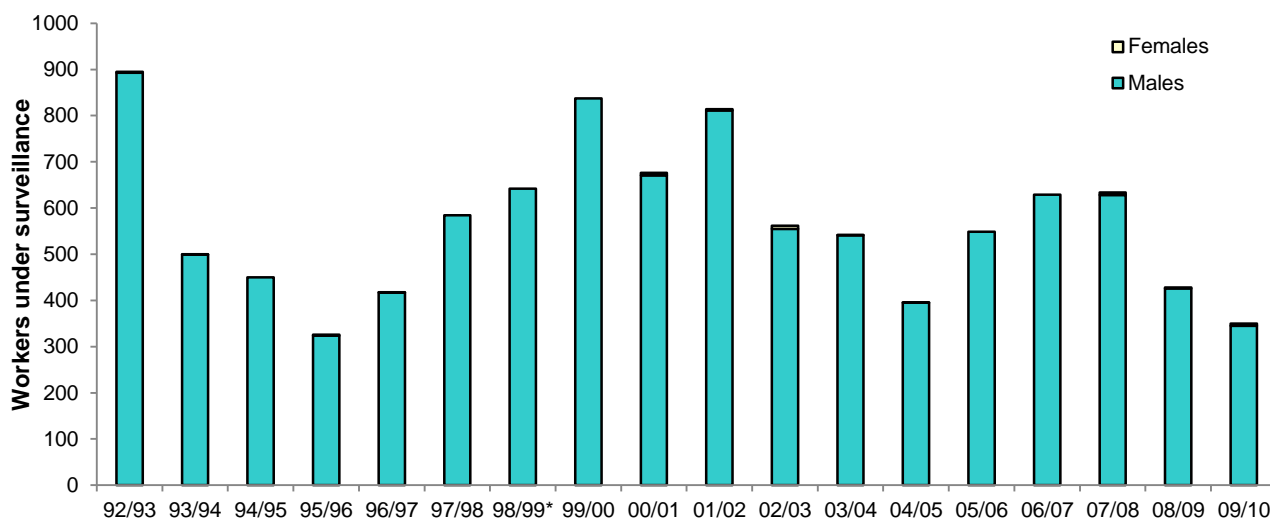


Figure 30 The total number of British lead workers under medical surveillance in the painting of building and vehicles sector since 1992/93 by sex

Males under surveillance

- In 1992/93 there were 893 males under surveillance in the painting of building and vehicles sector; by 2009/10 this had fallen to 345 males
- There were 6 records of young males under surveillance; 3 in 2007/08, and 1 in each of the three years 2002/03, 2008/09 and 2009/10
- In 1992/93 there were 13 males (1.5% of male workers) with a recorded blood-lead level at or above 70µg/100ml; this reduced to none in 2009/10
- In 1992/93 there were 30 males (3.4% of male workers) with a recorded blood-lead level at or above 60µg/100ml; this reduced to 3 males (0.9% of male workers) in 2009/10
- None of the young males were recorded with a high blood-lead levels (a blood-lead level at or above 50µg/100ml)
- The number of male workers under medical surveillance who were suspended from working with lead has varied from 13 in 1992/93 up to 28 in 2001/02 and down to 4 in 2009/10
- In 1992/93 the median male blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median male blood-lead level was under 20µg/100ml. Over the following 13 years the median male blood-lead level remained under 20µg/100ml and was under 10µg/100ml in 2009/10
- The proportion of males recorded with a blood-lead level >40µg/100ml has increased from 8.7% of male workers in 1992/93 to 15.0% of male workers 2001/02 then decreased to 7.0% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement greater than 40µg/100ml increased by 2% (Figure 31, left hand panel)
- The proportion of males recorded with a blood-lead level <10µg/100ml has increased from 44.1% of male workers in 1998/99 to 54.5% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than 10µg/100ml increased by 3% (Figure 31, right hand panel)

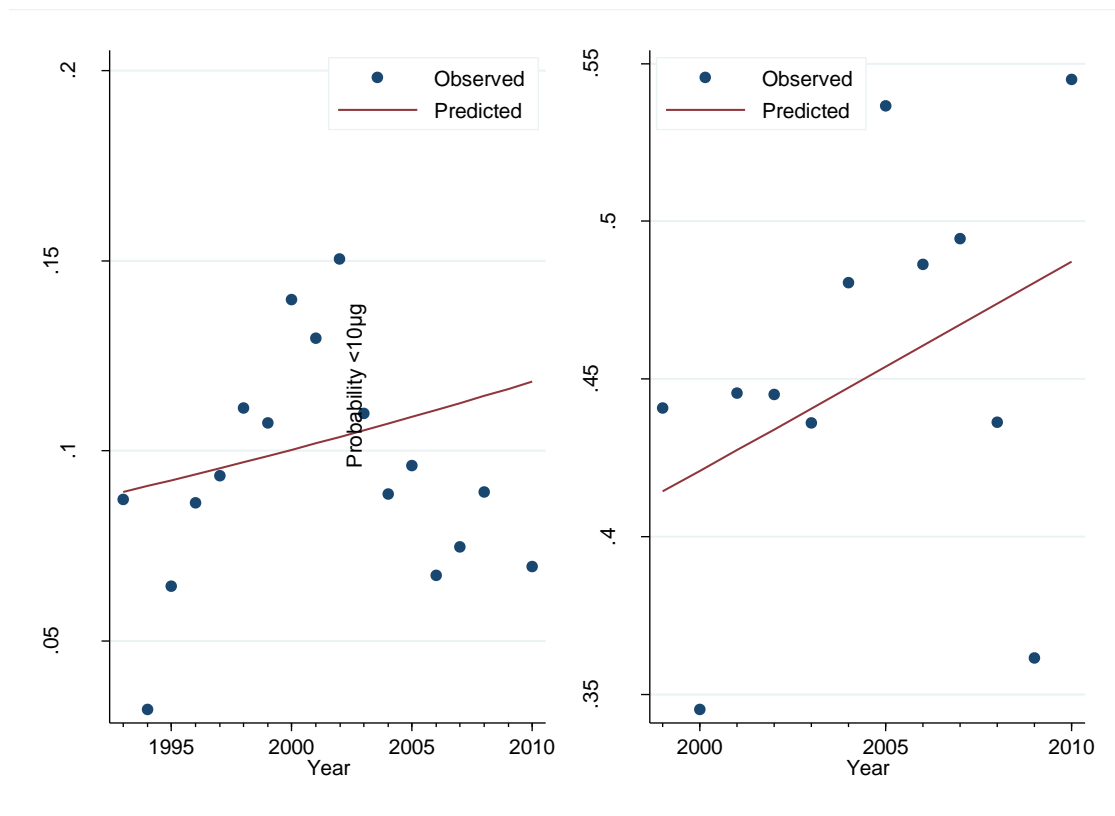


Figure 31 Probability of male blood-lead measurement by year [predicted by logistic regression]. The graph on the left is for the probability of a male blood-lead measurement >40µg/100ml. The graph on the right is for the probability of a male blood-lead measurement <10µg/100ml

Females under surveillance

- In 1992/93 there were 2 females under surveillance in the painting of building and vehicles sector; by 2009/10 this had risen to 5 females
- There were no young females under surveillance between 1998/99 and 2009/10
- Over the 18 year period there were no females with a recorded blood-lead level at or above 40µg/100ml
- Over the 14 year period in which lower blood-lead level data is available there were no females with a recorded blood-lead level at or above 30µg/100ml
- In 2000/01 there was 1 female worker under medical surveillance who was suspended from working with lead
- In 1992/93 the median female blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median female blood-lead level was under 25µg/100ml. Over the following 13 years the median female blood-lead level reduced to under 10µg/100ml in 2009/10
- Over the 14 year period from 1996/97 all females were recorded with a blood-lead level <25µg/100ml

Sector 11: Work with metallic lead and lead containing alloys

The number of workers under medical surveillance in the work with metallic lead and lead containing alloys sector fell by 75% from 1,888 in 1992/93 to 466 in 2009/10. The number of young people (under 18 years) under medical surveillance has varied from none in 2006/07 and 2007/08 to 18 in 2005/06.

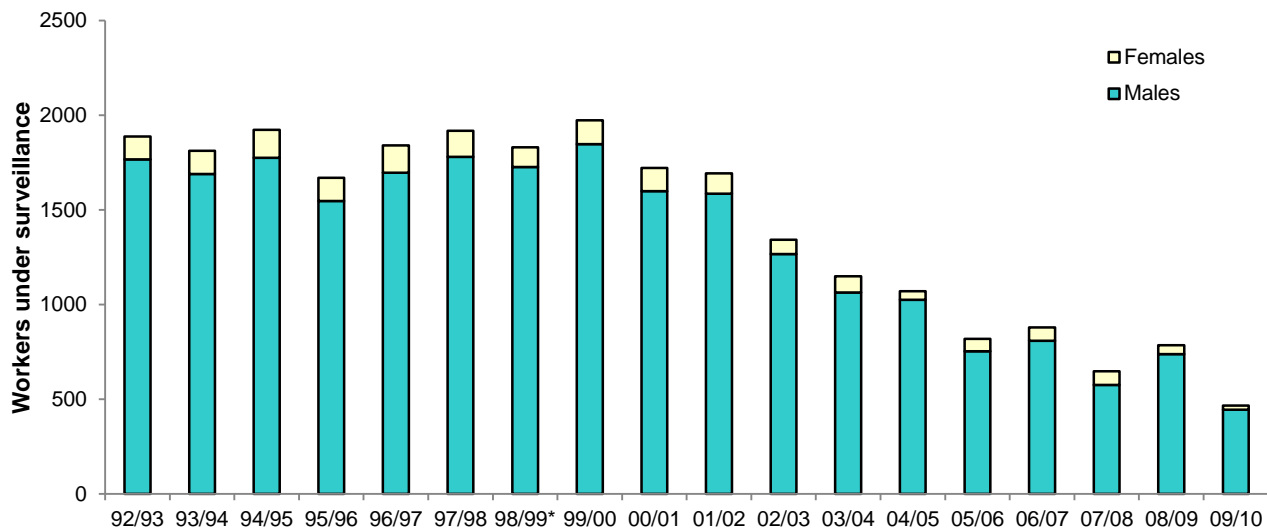


Figure 32 The total number of British lead workers under medical surveillance in the work with metallic lead and lead containing alloys sector since 1992/93 by sex

Males under surveillance

- In 1992/93 there were 1,767 males under surveillance in the work with metallic lead and lead containing alloys sector; by 2009/10 this had fallen to 444 males
- The number of young males under surveillance has decreased from 5 in 1998/99 to 2 in 2009/10; after an increase to 12 in 2002/03
- In 1992/93 there were 6 males (0.3% of male workers) with a recorded blood-lead level at or above 70µg/100ml; this reduced to none in 2009/10
- In 1992/93 there were 41 males (2.3% of male workers) with a recorded blood-lead level at or above 60µg/100ml; this reduced to 1 male (0.2% of male workers) in 2009/10
- Over the course of the regulations no young males were recorded with high blood-lead levels (a blood-lead level at or above 50µg/100ml)
- The number of male workers under medical surveillance who were suspended from working with lead has steadily reduced from 10 in 1992/93 to 1 in 2009/10
- In 1992/93 the median male blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median male blood-lead level was under 20µg/100ml. Over the following 13 years the median male blood-lead level remained under 20µg/100ml and was within the range 10-19µg/100ml in 2009/10
- The proportion of males recorded with a blood-lead level >40µg/100ml has decreased from 16.0% of male workers in 1992/93 to 7.2% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement greater than 40µg/100ml decreased by 5% (Figure 33, left hand panel)
- The proportion of males recorded with a blood-lead level <10µg/100ml has increased from 27.9% of male workers in 1998/99 to 30.2% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than 10µg/100ml increased by 2% (Figure 33, right hand panel)

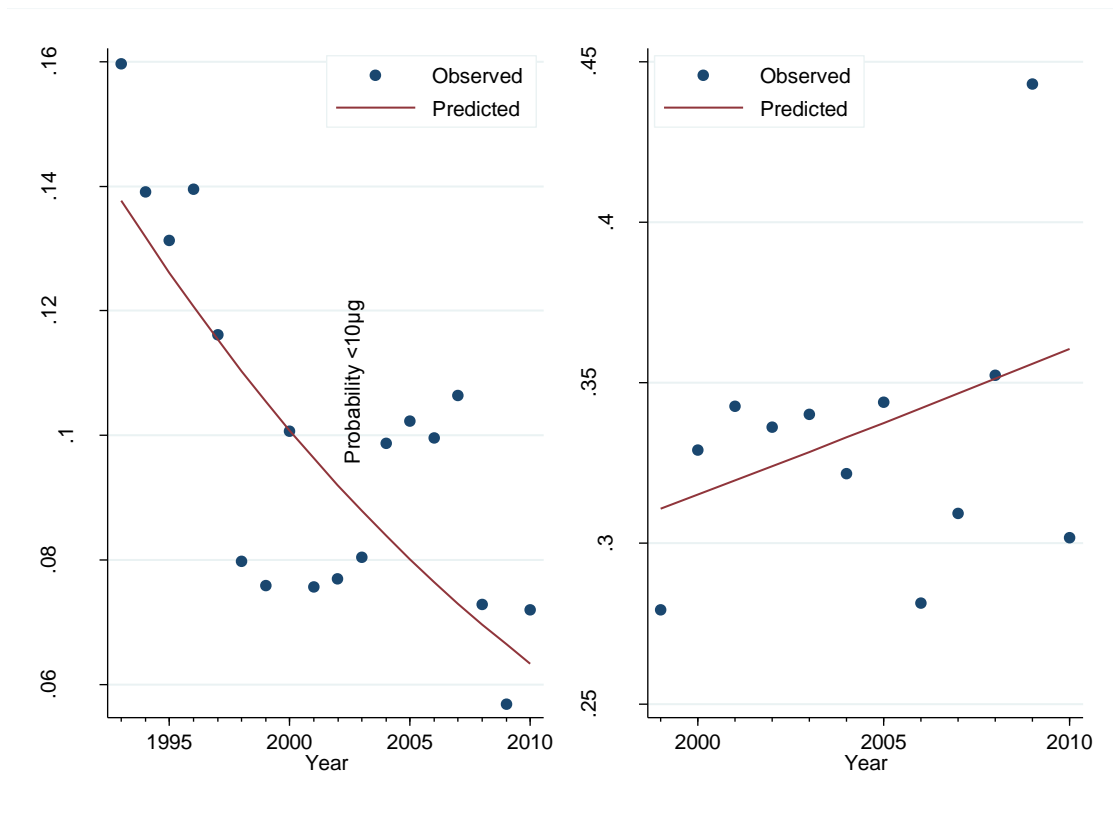


Figure 33 Probability of male blood-lead measurement by year [predicted by logistic regression]. The graph on the left is for the probability of a male blood-lead measurement >40µg/100ml. The graph on the right is for the probability of a male blood-lead measurement <10µg/100ml

Females under surveillance

- In 1992/93 there were 121 females under surveillance in the work with metallic lead and lead containing alloys sector; by 2009/10 this had fallen to 22 females
- The number of young females under surveillance has varied over the period with a high of 10 in 2005/06
- In 1992/93 there was 1 female (0.8% of female workers) with a recorded blood-lead level at or above $40\mu\text{g}/100\text{ml}$; this reduced to none in 2009/10
- In 1996/97 (the first year in which lower blood-lead level data is available) there were 8 females (5.5% of female workers) with a recorded blood-lead level at or above $30\mu\text{g}/100\text{ml}$; this reduced to none in 2009/10
- The number of female workers under medical surveillance who were suspended from working with lead has been low, with 9 suspensions over the 18 year period
- In 1992/93 the median female blood-lead level was under $40\mu\text{g}/100\text{ml}$ (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median female blood-lead level was under $20\mu\text{g}/100\text{ml}$. Over the following 13 years the median female blood-lead level reduced to under $10\mu\text{g}/100\text{ml}$ in 2009/10
- The proportion of females recorded with a blood-lead level $>25\mu\text{g}/100\text{ml}$ has decreased from 12.4% of female workers in 1996/97 to 0% of female workers from 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than $10\mu\text{g}/100\text{ml}$ decreased by 20% (Figure 34, left hand panel)
- The proportion of females recorded with a blood-lead level $<10\mu\text{g}/100\text{ml}$ has increased from 55.2% of female workers in 1998/99 to 77.3% of female workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than $10\mu\text{g}/100\text{ml}$ increased by 8% (Figure 34, right hand panel)

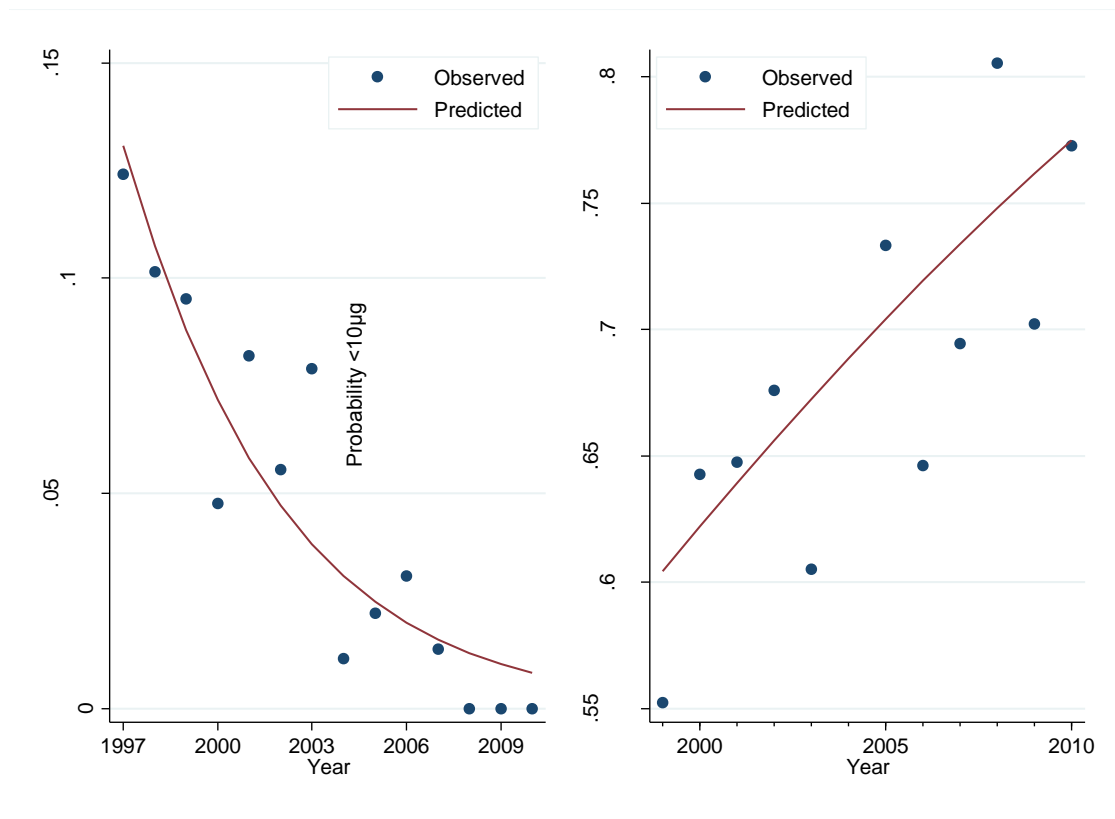


Figure 34 Probability of male blood-lead measurement by year [predicted by logistic regression]. The graph on the left is for the probability of a female blood-lead measurement $>25\mu\text{g}/100\text{ml}$. The graph on the right is for the probability of a female blood-lead measurement $<10\mu\text{g}/100\text{ml}$

Sector 12: Other processes

The number of workers under medical surveillance in other processes fell by 32% from 3,054 in 1992/93 to 2,080 in 2009/10. The number of young people (under 18 years) under medical surveillance has also decreased from 7 individuals in 1998/99 to 2 individuals in 2009/10; after an increase to 13 individuals in 2003/04.

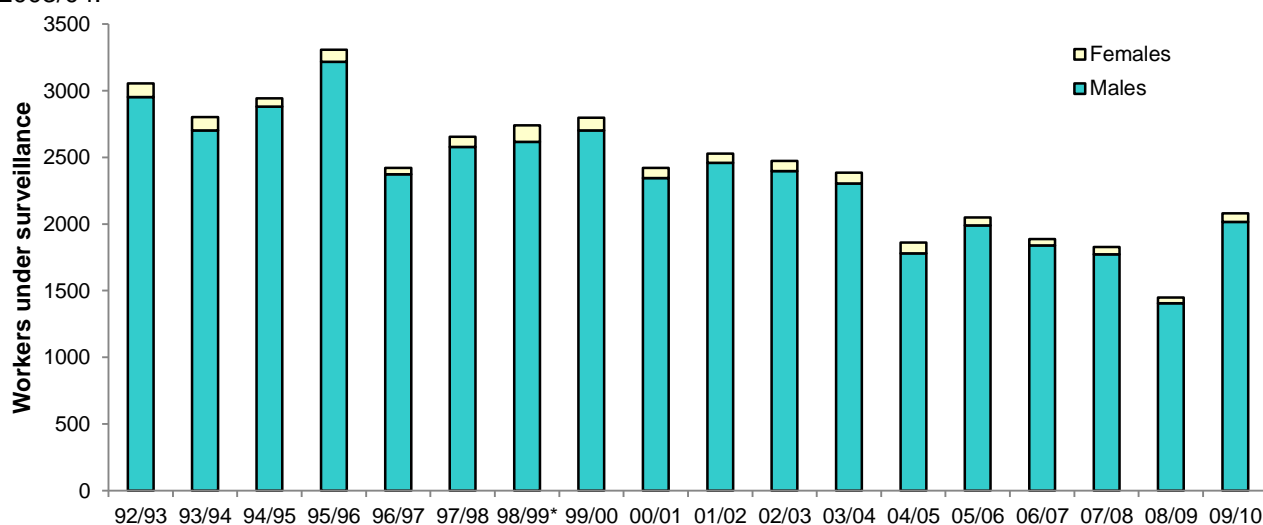


Figure 35 The total number of British lead workers under medical surveillance in other processes since 1992/93 by sex

Males under surveillance

- In 1992/93 there were 2,951 males under surveillance in other processes; by 2009/10 this had fallen to 2,015 males
- The number of young males under surveillance has decreased from 4 in 1998/99 to 2 in 2009/10, after a rise to 12 in 2003/04
- In 1992/93 there were 16 males (0.5% of male workers) with a recorded blood-lead level at or above 70µg/100ml; this reduced to 1 male (<0.1% of male workers) in 2009/10
- In 1992/93 there were 46 males (1.5% of male workers) with a recorded blood-lead level at or above 60µg/100ml; this reduced to 4 males (0.2% of male workers) in 2009/10
- Over the course of the regulations no young male has been recorded with a high blood-lead levels (a blood-lead level at or above 50µg/100ml)
- The number of male workers under medical surveillance who were suspended from working with lead has reduced from 8 in 1992/93 to 2 in 2009/10, after an increase corresponding to the reductions in the suspension/action levels in 1998/99
- In 1992/93 the median male blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median male blood-lead level was under 20µg/100ml. Over the following 13 years the median male blood-lead level remained under 20µg/100ml and was within the range 10-19µg/100ml in 2009/10
- The proportion of males recorded with a blood-lead level >40µg/100ml has decreased from 8.7% of male workers in 1992/93 to 6.2% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement greater than 40µg/100ml decreased by 3%. (Figure 36, left hand panel)
- The proportion of males recorded with a blood-lead level <10µg/100ml has increased from 40.2% of male workers in 1998/99 to 48.9% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than 10µg/100ml increased by 3%. (Figure 36, right hand panel)

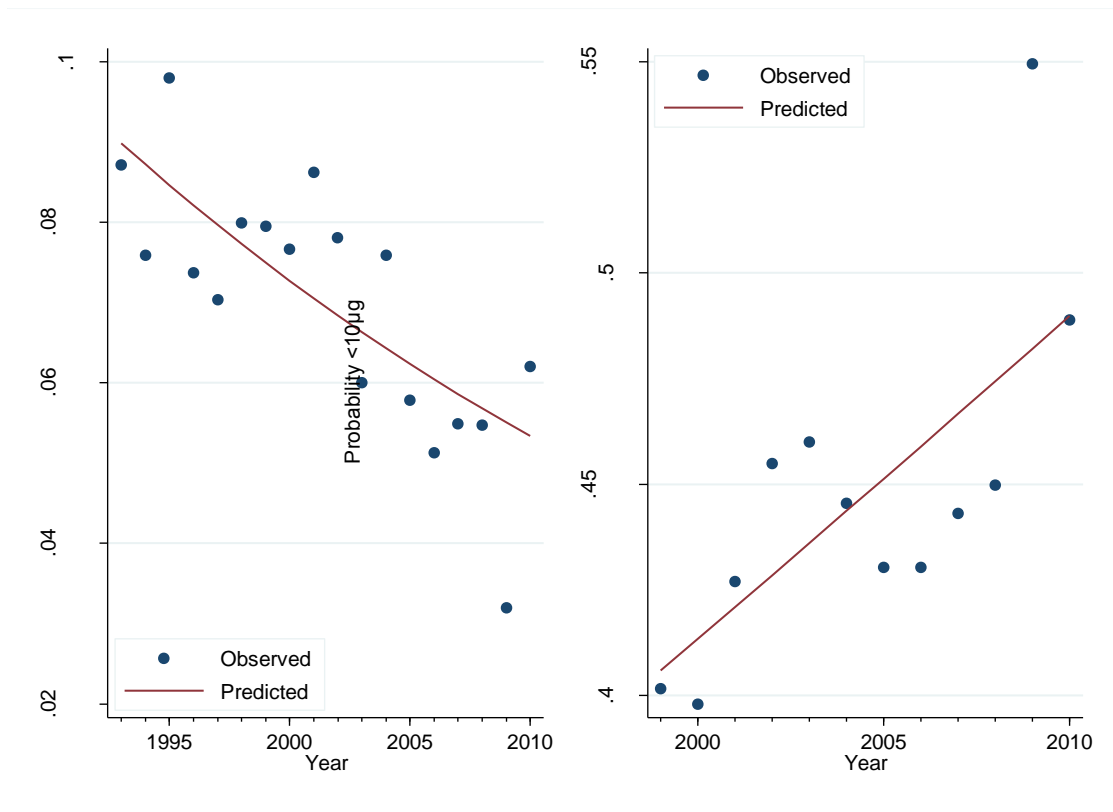


Figure 36 Probability of male blood-lead measurement by year [predicted by logistic regression]. The graph on the left is for the probability of a male blood-lead measurement >40µg/100ml. The graph on the right is for the probability of a male blood-lead measurement <10µg/100ml

Females under surveillance

- In 1992/93 there were 103 females under surveillance in other processes; by 2009/10 this had fallen to 65 females
- The number of young females under surveillance has decreased over the period with a high of 3 in 1998/99 and none between 2007/08 and 2009/10
- In 1992/93 there were no females with a recorded blood-lead level at or above $40\mu\text{g}/100\text{ml}$; this increased to 5 females in 1998/99 (4.1% of female workers) and then reduced to none in 2009/10
- In 1996/97 (the first year in which lower blood-lead level data is available) there were 3 females (6.3% of female workers) with a recorded blood-lead level at or above $30\mu\text{g}/100\text{ml}$; this reduced to none in 2009/10
- There were no females suspended before the new suspension limits in 1998/99; after which the number of female workers under medical surveillance who were suspended from working with lead fell from 5 in 1998/99 to none in 2009/10
- In 1992/93 the median female blood-lead level was under $40\mu\text{g}/100\text{ml}$ (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median female blood-lead level was under $20\mu\text{g}/100\text{ml}$. Over the following 13 years the median female blood-lead level reduced to under $10\mu\text{g}/100\text{ml}$ in 2009/10
- The proportion of females recorded with a blood-lead level $>25\mu\text{g}/100\text{ml}$ has decreased from 6.2% of female workers in 1996/97 to 1.5% of female workers in 2009/10
- The proportion of females recorded with a blood-lead level $<10\mu\text{g}/100\text{ml}$ has increased from 57.4% of female workers in 1998/99 to 67.7% of female workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than $10\mu\text{g}/100\text{ml}$ increased by 9% (Figure 39)

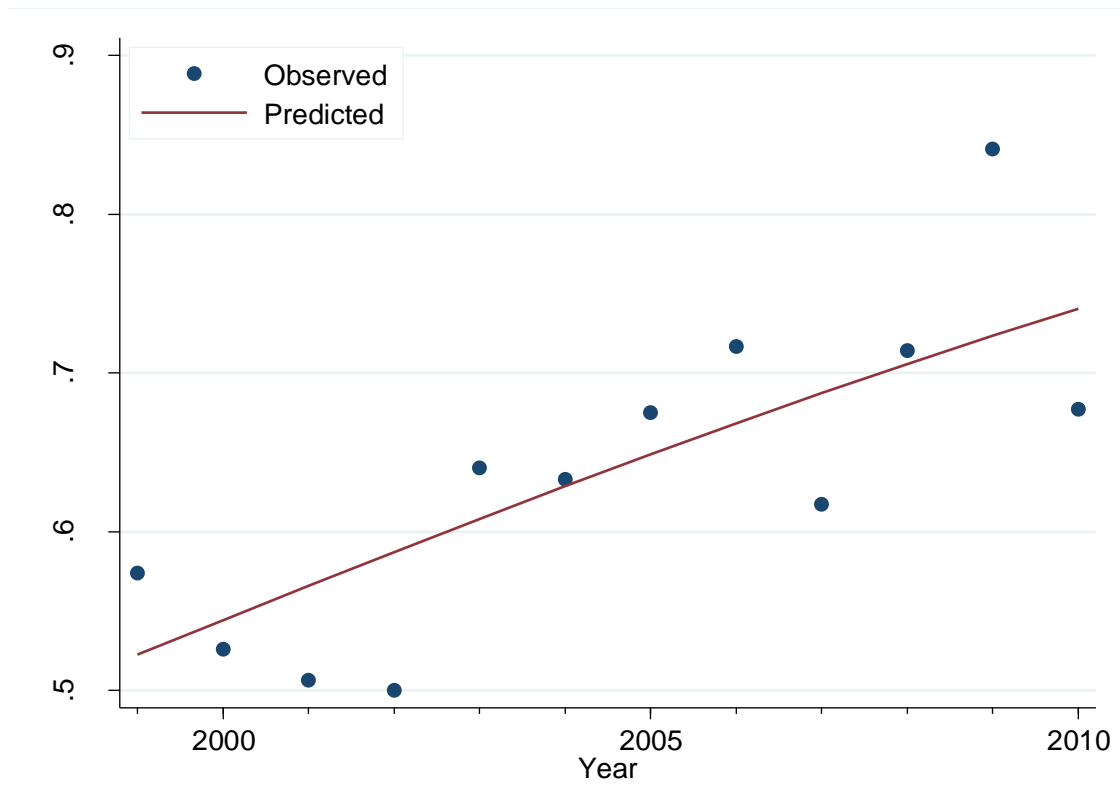


Figure 37 Probability of a female blood-lead measurement $<10\mu\text{g}/100\text{ml}$ by year [predicted by logistic regression]

Sector 13: Scrap industry

The number of workers under medical surveillance in the scrap industry more than tripled from 146 in 1992/93 to 537 in 2009/10. There were 5 records of young people (under 18 years) under medical surveillance; 2 in each of the years 2001/02 and 2003/04 and another in 2009/10.

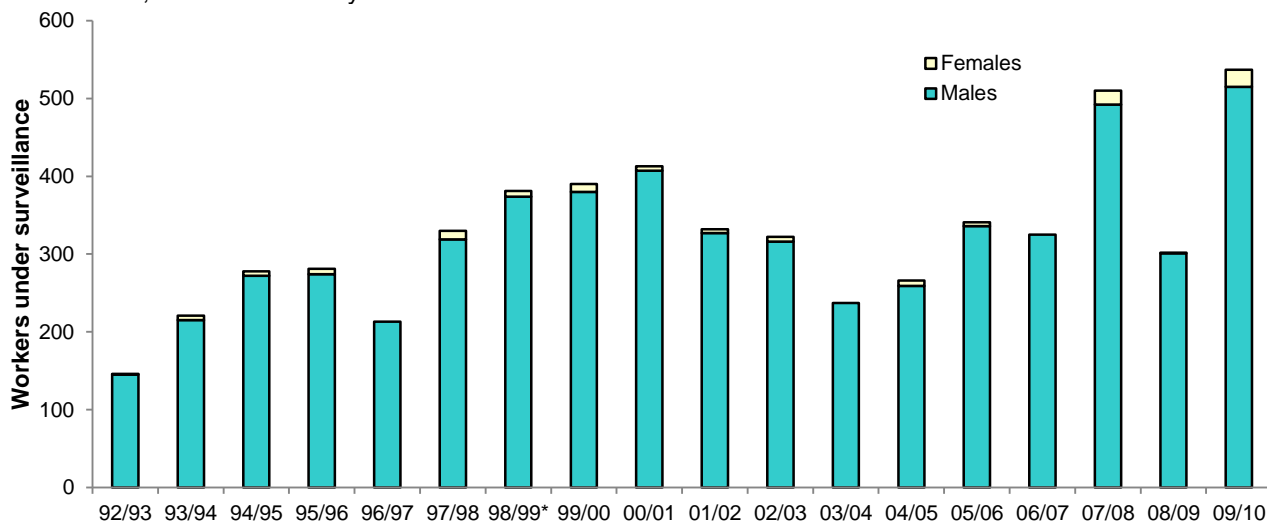


Figure 38 The total number of British lead workers under medical surveillance in scrap industry since 1992/93 by sex

Males under surveillance

- In 1992/93 there were 145 males under surveillance in the scrap industry; by 2009/10 this had risen to 515 males
- There were 5 young males under surveillance over the period from 1998/99 to 2009/10
- In 1992/93 there were 10 males (6.9% of male workers) with a recorded blood-lead level at or above 70µg/100ml; this reduced to none in 2006/07 then increased to 11 males (2.1% of male workers) in 2009/10
- In 1992/93 there were 23 males (15.9% of male workers) with a recorded blood-lead level at or above 60µg/100ml; this reduced to 1 male (0.3% of male workers) in 2006/07 then increased to 36 (7.0% of male workers) in 2009/10
- Over the course of the regulations 1 young male has been recorded with high blood-lead levels (a blood-lead level at or above 50µg/100ml) in 2003/04, this individual is not included in the figure stated above
- The number of male workers under medical surveillance who were suspended from working with lead has steadily reduced from 10 in 1992/93 to 1 in 2008/09; followed by an increase to 37 in 2009/10
- In 1992/93 the median male blood-lead level was under 40µg/100ml (no data are available to narrow this down to a range). In 1996/97 (the first year lower blood-lead ranges were collected) the median male blood-lead level was within the range 25-29µg/100ml. Over the following 13 years the median male blood-lead level reduced to under 10µg/100ml in 2009/10
- The proportion of males recorded with a blood-lead level >40µg/100ml has decreased from 31.0% of male workers in 1992/93 to 19.6% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement greater than 40µg/100ml decreased by 8%. (Figure 41, left hand panel)
- The proportion of males recorded with a blood-lead level <10µg/100ml has increased from 8.3% of male workers in 1998/99 to 50.3% of male workers in 2009/10. Each year, on average, the odds of having a recorded blood-lead measurement less than 10µg/100ml increased by 22%. (Figure 41, right hand panel)

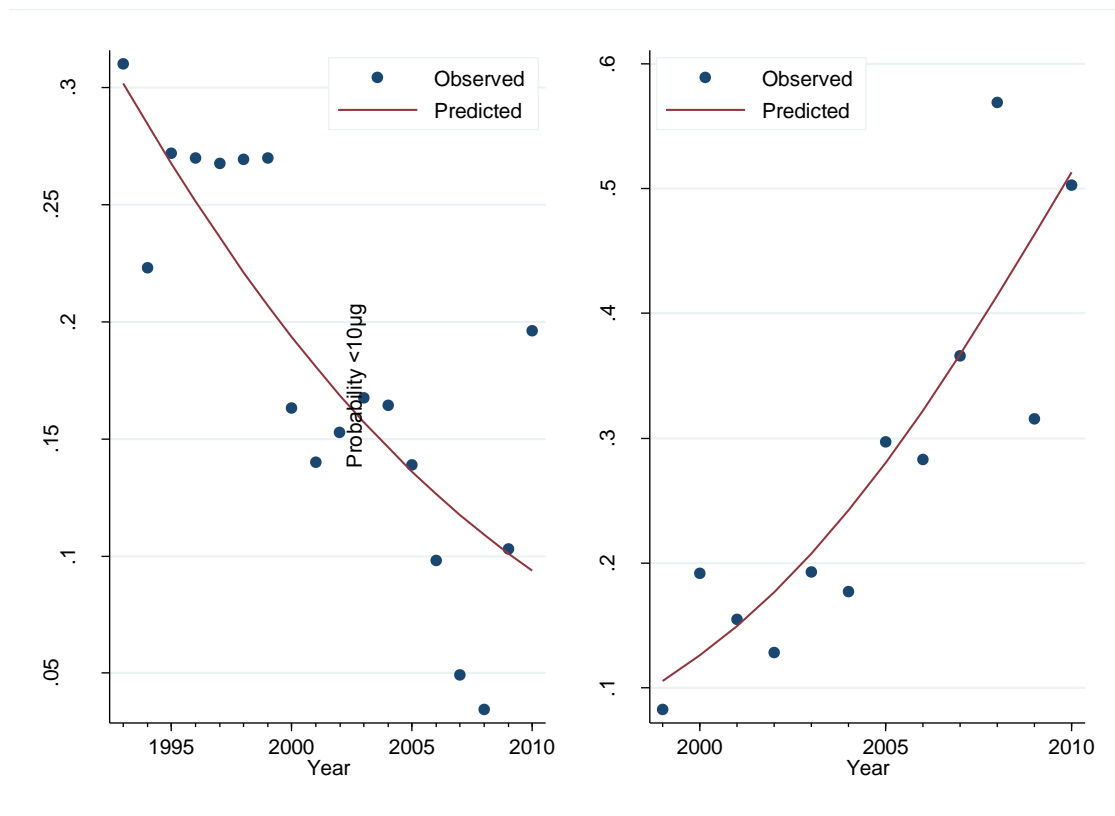


Figure 39 Probability of male blood-lead measurement by year [predicted by logistic regression]. The graph on the left is for the probability of a male blood-lead measurement $>40\mu\text{g}/100\text{ml}$. The graph on the right is for the probability of a male blood-lead measurement $<10\mu\text{g}/100\text{ml}$

Females under surveillance

- In 1992/93 there was 1 female under surveillance in the scrap industry; by 2009/10 this had risen to 22 females
- There were no young females under surveillance over the period 1998/99 to 2009/10
- Over the 18 year period there were no females with a recorded blood-lead level at or above $40\mu\text{g}/100\text{ml}$
- Over the 14 year period that lower blood-lead level data is available there were no females with a recorded blood-lead level at or above $30\mu\text{g}/100\text{ml}$
- None of the female workers under medical surveillance were suspended from working with lead over the 18 year period
- In 1992/93 the median female blood-lead level was under $40\mu\text{g}/100\text{ml}$ (no data are available to narrow this down to a range). In 1997/98 (the first year lower blood-lead ranges were collected) the median female blood-lead level was under $20\mu\text{g}/100\text{ml}$. Over the following 13 years the median female blood-lead level reduced to under $10\mu\text{g}/100\text{ml}$ in 2009/10
- There were two years when any females were recorded with a blood-lead level $>25\mu\text{g}/100\text{ml}$, these were 1998/99 with 14.3% of female workers and 1999/00 with 10.0% of female workers
- The proportion of females recorded with a blood-lead level $<10\mu\text{g}/100\text{ml}$ has increased from 14.3% of female workers in 1998/99 to 95.5% of female workers in 2009/10

Appendix

The tables that follow are provided to supplement the figures and key points detailed in this report. The tables provide a breakdown of blood-lead level measurements undertaken each year by sex and industrial sector.

All workers under medical surveillance

Table 3 The breakdown of male lead workers under medical surveillance, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year (Figures are for the total number of male workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	25-29 μg	30-34 μg	35-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	70+ μg	Individuals Suspended	Median range
92/93							15677 78.4%	2260 11.3%	1290 6.4%	578 2.9%	141 0.7%	55 0.3%	196 1.0%	147	<40 μg
93/94							13509 78.5%	2038 11.8%	972 5.7%	476 2.8%	154 0.9%	50 0.3%	204 1.2%	116	<40 μg
94/95							13304 79.1%	1870 11.1%	1023 6.1%	432 2.6%	153 0.9%	39 0.2%	192 1.1%	121	<40 μg
95/96							12364 80.0%	1636 10.6%	972 6.3%	357 2.3%	92 0.6%	34 0.2%	126 0.8%	72	<40 μg
96/97	6959 42.9%		1646 10.2%	1487 9.2%	1474 9.1%	1258 7.8%	12824 79.1%	1761 10.9%	1049 6.5%	449 2.8%	104 0.6%	23 0.1%	127 0.8%	66	20-24 μg
97/98	8238 47.0%		1673 9.5%	1613 9.2%	1546 8.8%	1299 7.4%	14369 82.0%	1849 10.6%	930 5.3%	265 1.5%	74 0.4%	36 0.2%	110 0.6%	55	20-24 μg
98/99*	4376 (21) 25.4%	3876 (11) 22.5%	1720 (3) 10.0%	1635 (5) 9.5%	1435 8.3%	1246 7.2%	14288 (40) 83.1%	1686 9.8%	903 (1) 5.3%	251 1.5%	55 0.3%	16 0.1%	71 0.4%	179	20-24 μg
99/00	4605 (26) 27.4%	3748 (17) 22.3%	1704 (1) 10.1%	1699 (1) 10.1%	1382 8.2%	1233 (1) 7.3%	14371 (46) 85.4%	1578 9.4%	671 4.0%	165 1.0%	37 0.2%	10 0.1%	47 0.3%	117	20-24 μg
00/01	4394 (20) 28.5%	3231 (11) 21.0%	1655 (1) 10.7%	1436 9.3%	1231 (1) 8.0%	1097 7.1%	13044 (33) 84.6%	1559 10.1%	627 4.1%	134 0.9%	34 0.2%	13 0.1%	47 0.3%	81	20-24 μg
01/02	4345 (8) 29.8%	3083 (7) 21.1%	1360 (1) 9.3%	1441 9.9%	1160 (1) 8.0%	1065 7.3%	12454 (17) 85.4%	1356 9.3%	614 4.2%	121 0.8%	20 0.1%	12 0.1%	32 0.2%	100	10-19 μg
02/03	3470 (8) 28.3%	2608 (6) 21.3%	1292 (3) 10.6%	1174 (2) 9.6%	992 (4) 8.1%	918 (1) 7.5%	10454 (24) 85.4%	1180 (1) 9.6%	469 3.8%	102 0.8%	28 0.2%	12 0.1%	40 0.3%	68	20-24 μg
03/04	3351 (16) 30.4%	2471 (7) 22.4%	1118 (3) 10.2%	1023 (1) 9.3%	855 (3) 7.8%	710 6.4%	9528 (30) 86.5%	947 (1) 8.6%	397 (1) 3.6%	102 0.9%	29 0.3%	8 0.1%	37 0.3%	83 (1)	10-19 μg
04/05	2855 (12) 30.8%	2070 (6) 22.3%	942 (3) 10.2%	805 (1) 8.7%	755 (3) 8.1%	619 (1) 6.7%	8046 (26) 86.8%	770 8.3%	338 3.6%	85 0.9%	23 0.2%	5 0.1%	28 0.3%	66	10-19 μg
05/06	2484 (3) 30.0%	1962 (5) 23.7%	842 10.2%	708 (3) 8.6%	617 7.5%	542 (1) 6.5%	7155 (12) 86.4%	721 8.7%	315 3.8%	64 0.8%	15 0.2%	8 0.1%	23 0.3%	59	10-19 μg
06/07	2718 32.4%	1923 (1) 23.0%	862 (1) 10.3%	765 (2) 9.1%	622 7.4%	478 5.7%	7368 (4) 88.0%	699 8.3%	232 2.8%	48 0.6%	16 0.2%	13 0.2%	29 0.3%	28	10-19 μg
07/08	2812 (3) 36.3%	1758 (3) 22.7%	747 9.6%	625 8.1%	478 (1) 6.2%	634 8.2%	7054 (7) 91.0%	450 5.8%	206 2.7%	34 0.4%	5 0.1%	3 0.0%	8 0.1%	29	10-19 μg
08/09	2262 (8) 34.5%	1516 (3) 23.1%	663 (4) 10.1%	559 (3) 8.5%	504 (1) 7.7%	342 5.2%	5846 (19) 89.1%	457 7.0%	204 3.1%	48 0.7%	6 0.1%	2 0.0%	8 0.1%	16	10-19 μg
09/10	2562 (2) 37.0%	1676 (3) 24.2%	767 (1) 11.1%	602 8.7%	465 (1) 6.7%	320 4.6%	6392 (7) 92.4%	360 (1) 5.2%	112 1.6%	37 0.5%	7 0.1%	8 0.1%	15 0.2%	51 (1)	10-19 μg

Table 4 The breakdown of female lead workers under medical surveillance, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year (Figures are for the total number of female workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	<25 μg	25-29 μg	30-34 μg	35-39 μg	30-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	>40 μg	Individuals Suspended	Median range
92/93									1071 96.3%	28 2.5%	9 0.8%	3 0.3%	1 0.1%	0 0.0%	41 3.7%	5	<40 μg
93/94									801 96.4%	15 1.8%	8 1.0%	3 0.4%	2 0.2%	2 0.2%	30 3.6%	12	<40 μg
94/95									822 96.3%	22 2.6%	5 0.6%	4 0.5%	1 0.1%	0 0.0%	32 3.7%	12	<40 μg
95/96									921 97.0%	19 2.0%	4 0.4%	3 0.3%	2 0.2%	0 0.0%	28 3.0%	12	<40 μg
96/97	723 78.4%	84 9.1%	807 87.5%	51 5.5%	26 2.8%	18 2.0%	44 4.8%	902 97.8%	12 1.3%	4 0.4%	3 0.3%	1 0.1%	0 0.0%	20 2.2%	3	<20 μg	
97/98	686 80.9%	82 9.7%	768 90.6%	30 3.5%	30 3.5%	10 1.2%	40 4.7%	838 98.8%	7 0.8%	3 0.4%	0 0.0%	0 0.0%	0 0.0%	10 1.2%	3	<20 μg	
98/99*	385 (3) 49.6%	243 (2) 31.3%	61 7.9%	689 (5) 88.8%	37 (1) 4.8%	16 2.1%	16 2.1%	32 4.1%	758 (6) 97.7%	14 1.8%	1 0.1%	3 0.4%	0 0.0%	0 0.0%	18 2.3%	18	10-19 μg
99/00	412 (6) 50.7%	289 (1) 35.5%	58 7.1%	759 (7) 93.4%	32 3.9%	11 1.4%	4 (1) 0.5%	15 (1) 1.8%	806 (8) 99.1%	4 0.5%	3 0.4%	0 0.0%	0 0.0%	0 0.0%	7 0.9%	7 (1)	<10 μg
00/01	381 (6) 53.2%	217 (9) 30.3%	50 7.0%	648 (15) 90.5%	36 5.0%	17 2.4%	8 1.1%	25 3.5%	709 (15) 99.0%	5 0.7%	2 0.3%	0 0.0%	0 0.0%	0 0.0%	7 1.0%	13	<10 μg
01/02	330 (3) 53.2%	199 32.1%	31 5.0%	560 (3) 90.3%	36 5.8%	14 2.3%	3 0.5%	17 2.7%	613 (3) 98.9%	4 0.6%	3 0.5%	0 0.0%	0 0.0%	0 0.0%	7 1.1%	10	<10 μg
02/03	325 (3) 61.6%	141 26.7%	25 4.7%	491 (3) 93.0%	19 3.6%	9 1.7%	7 1.3%	16 3.0%	526 (3) 99.6%	1 0.2%	1 0.2%	0 0.0%	0 0.0%	0 0.0%	2 0.4%	5	<10 μg
03/04	300 (5) 64.2%	101 (1) 21.6%	26 5.6%	427 (6) 91.4%	19 (1) 4.1%	10 2.1%	8 1.7%	18 3.9%	464 (7) 99.4%	2 0.4%	1 0.2%	0 0.0%	0 0.0%	0 0.0%	3 0.6%	10	<10 μg
04/05	284 67.9%	77 18.4%	30 7.2%	391 93.5%	12 2.9%	8 1.9%	5 1.2%	13 3.1%	416 99.5%	1 0.2%	0 0.0%	1 0.2%	0 0.0%	0 0.0%	2 0.5%	1	<10 μg
05/06	227 (5) 66.8%	73 (5) 21.5%	18 5.3%	318 (10) 93.5%	11 3.2%	7 2.1%	2 0.6%	9 2.6%	338 (10) 99.4%	2 0.6%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	2 0.6%	1	<10 μg
06/07	224 (2) 69.8%	66 (2) 20.6%	17 5.3%	307 (4) 95.6%	9 2.8%	2 0.6%	2 0.6%	4 1.2%	320 (4) 99.7%	1 0.3%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 0.3%	1	<10 μg
07/08	245 77.3%	47 14.8%	13 4.1%	305 96.2%	8 2.5%	2 0.6%	1 0.3%	3 0.9%	316 99.7%	1 0.3%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 0.3%	0	<10 μg
08/09	191 (2) 71.3%	50 18.7%	14 (1) 5.2%	255 (3) 95.1%	7 2.6%	3 1.1%	3 1.1%	6 2.2%	268 (3) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1	<10 μg
09/10	178 72.4%	51 20.7%	10 4.1%	239 97.2%	4 1.6%	1 0.4%	2 0.8%	3 1.2%	246 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0	<10 μg

Workers under medical surveillance in the smelting, refining, alloying and casting sector

Table 5 The breakdown of male lead workers under medical surveillance in the smelting, refining, alloying and casting sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year (Figures are for the total number of male workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	25-29 μg	30-34 μg	35-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	70+ μg	Median range
92/93							4040 74.8%	738 13.7%	425 7.9%	149 2.8%	31 0.6%	15 0.3%	46 0.9%	<40 μg
93/94							3550 77.7%	579 12.7%	335 7.3%	85 1.9%	14 0.3%	4 0.1%	18 0.4%	<40 μg
94/95							3330 77.9%	546 12.8%	301 7.0%	78 1.8%	15 0.4%	3 0.1%	18 0.4%	<40 μg
95/96							2800 75.1%	508 13.6%	310 8.3%	97 2.6%	9 0.2%	6 0.2%	15 0.4%	<40 μg
96/97	1153 33.3%		342 9.9%	338 9.8%	367 10.6%	363 10.5%	2563 74.0%	499 14.4%	306 8.8%	79 2.3%	10 0.3%	5 0.1%	15 0.4%	25-29 μg
97/98	1475 37.1%		481 12.1%	445 11.2%	444 11.2%	367 9.2%	3212 80.7%	504 12.7%	213 5.4%	36 0.9%	14 0.4%	0 0.0%	14 0.4%	25-29 μg
98/99*	1119 (3) 24.3%	933 (2) 20.3%	463 10.1%	477 (1) 10.4%	425 9.2%	378 8.2%	3795 (6) 82.5%	517 11.2%	220 (1) 4.8%	52 1.1%	14 0.3%	1 0.0%	15 0.3%	20-24 μg
99/00	920 (4) 24.3%	722 (4) 19.1%	411 10.9%	416 11.0%	404 10.7%	357 9.4%	3230 (8) 85.3%	402 10.6%	131 3.5%	19 0.5%	6 0.2%	0 0.0%	6 0.2%	20-24 μg
00/01	964 (3) 26.0%	705 (2) 19.0%	426 11.5%	364 9.8%	368 9.9%	294 7.9%	3121 (5) 84.2%	427 11.5%	131 3.5%	21 0.6%	6 0.2%	1 0.0%	7 0.2%	20-24 μg
01/02	865 25.1%	644 (1) 18.7%	313 9.1%	456 13.2%	341 9.9%	301 8.7%	2920 (1) 84.7%	372 10.8%	125 3.6%	26 0.8%	4 0.1%	1 0.0%	5 0.1%	20-24 μg
02/03	325 13.4%	507 21.0%	315 (1) 13.0%	315 (1) 13.0%	286 (1) 11.8%	262 10.8%	2010 (3) 83.1%	325 13.4%	66 2.7%	15 0.6%	4 0.2%	0 0.0%	4 0.2%	25-29 μg
03/04	398 20.5%	482 (1) 24.9%	254 (1) 13.1%	232 (1) 12.0%	180 9.3%	132 6.8%	1678 (3) 86.6%	149 (1) 7.7%	79 4.1%	23 1.2%	6 0.3%	2 0.1%	8 0.4%	20-24 μg
04/05	267 17.4%	394 (1) 25.7%	188 12.3%	181 (1) 11.8%	153 (2) 10.0%	118 7.7%	1301 (4) 84.9%	138 9.0%	67 4.4%	20 1.3%	5 0.3%	1 0.1%	6 0.4%	20-24 μg
05/06	286 21.3%	364 27.1%	173 12.9%	154 11.5%	120 8.9%	98 7.3%	1195 89.0%	96 7.2%	37 2.8%	9 0.7%	4 0.3%	1 0.1%	5 0.4%	20-24 μg
06/07	299 19.9%	442 (1) 29.4%	219 (1) 14.6%	179 (2) 11.9%	156 10.4%	88 5.8%	1383 (4) 91.9%	94 6.2%	23 1.5%	4 0.3%	1 0.1%	0 0.0%	1 0.1%	20-24 μg
07/08	350 26.2%	468 35.0%	192 14.3%	137 10.2%	87 6.5%	55 4.1%	1289 96.3%	37 2.8%	9 0.7%	3 0.2%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
08/09	202 (6) 20.0%	293 (2) 29.0%	94 9.3%	99 (1) 9.8%	79 7.8%	67 6.6%	834 (9) 82.7%	103 10.2%	48 4.8%	24 2.4%	0 0.0%	0 0.0%	0 0.0%	20-24 μg
09/10	306 23.2%	439 (1) 33.2%	207 15.7%	157 11.9%	122 (1) 9.2%	49 3.7%	1280 (2) 96.9%	34 2.6%	6 0.5%	1 0.1%	0 0.0%	0 0.0%	0 0.0%	10-19 μg

Table 6 The breakdown of female lead workers under medical surveillance in the smelting, refining, alloying and casting sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year (Figures are for the total number of female workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	<25 μg	25-29 μg	30-34 μg	35-39 μg	30-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	>40 μg	Median range	
92/93									136 97.1%	4 2.9%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	4 2.9%	<40 μg	
93/94									78 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
94/95									103 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
95/96									89 97.8%	2 2.2%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	2 2.2%	<40 μg	
96/97	77 80.2%	9 9.4%	86 89.6%	5 5.2%	2 2.1%	3 3.1%	5 5.2%	96 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<20 μg
97/98	102 91.9%	6 5.4%	108 97.3%	0 0.0%	2 1.8%	1 0.9%	3 2.7%	111 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<20 μg
98/99*	93 56.0%	43 25.9%	15 9.0%	151 91.0%	10 6.0%	2 1.2%	3 1.8%	5 3.0%	166 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
99/00	66 (1) 58.9%	35 31.3%	7 6.3%	108 (1) 96.4%	2 1.8%	2 1.8%	0 0.0%	2 1.8%	112 (1) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
00/01	77 (2) 69.4%	28 (8) 25.2%	6 5.4%	111 (10) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	111 (10) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
01/02	51 55.4%	35 38.0%	2 2.2%	88 95.7%	3 3.3%	0 0.0%	1 1.1%	1 1.1%	92 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
02/03	53 (2) 84.1%	9 14.3%	0 0.0%	62 (2) 98.4%	0 0.0%	1 1.6%	0 0.0%	1 1.6%	63 (2) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
03/04	42 (1) 87.5%	5 10.4%	0 0.0%	47 (1) 97.9%	0 0.0%	1 2.1%	0 0.0%	1 2.1%	48 (1) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
04/05	32 82.1%	5 12.8%	1 2.6%	38 97.4%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	38 97.4%	1 2.6%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 2.6%	<10 μg	
05/06	43 93.5%	2 4.3%	0 0.0%	45 97.8%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	45 97.8%	1 2.2%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 2.2%	<10 μg	
06/07	50 89.3%	4 7.1%	2 3.6%	56 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	56 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
07/08	44 100.0%			44 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	44 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
08/09	18 81.8%	4 18.2%	0 0.0%	22 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	22 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
09/10	35 79.5%	8 18.2%	1 2.3%	44 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	44 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg

Workers under medical surveillance in the lead battery industry

Table 7 The breakdown of male lead workers under medical surveillance in the lead battery industry, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year
(Figures are for the total number of male workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	25-29 μg	30-34 μg	35-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	70+ μg	Median range
92/93							2095 55.7%	796 21.2%	537 14.3%	253 6.7%	63 1.7%	15 0.4%	78 2.1%	<40 μg
93/94							1829 53.8%	794 23.4%	380 11.2%	276 8.1%	94 2.8%	24 0.7%	118 3.5%	<40 μg
94/95							2213 60.7%	677 18.6%	449 12.3%	215 5.9%	81 2.2%	13 0.4%	94 2.6%	<40 μg
95/96							1819 59.0%	612 19.9%	421 13.7%	175 5.7%	51 1.7%	3 0.1%	54 1.8%	<40 μg
96/97	708 17.8%		404 10.1%	344 8.6%	447 11.2%	456 11.4%	2359 59.2%	714 17.9%	540 13.5%	285 7.1%	76 1.9%	13 0.3%	89 2.2%	35-39 μg
97/98	859 21.9%		290 7.4%	390 9.9%	472 12.0%	460 11.7%	2471 62.9%	790 20.1%	479 12.2%	146 3.7%	35 0.9%	5 0.1%	40 1.0%	30-34 μg
98/99*	300 8.1%	499 (1) 13.4%	360 9.7%	398 10.7%	423 11.4%	415 11.2%	2395 (1) 64.5%	718 19.3%	453 12.2%	124 3.3%	23 0.6%	2 0.1%	25 0.7%	30-34 μg
99/00	440 (2) 12.0%	566 (2) 15.4%	363 9.9%	456 12.4%	387 10.5%	418 (1) 11.4%	2630 (5) 71.6%	658 17.9%	296 8.1%	73 2.0%	14 0.4%	2 0.1%	16 0.4%	30-34 μg
00/01	316 9.3%	407 (1) 12.0%	371 11.0%	441 13.0%	386 (1) 11.4%	417 12.3%	2338 (2) 69.1%	656 19.4%	319 9.4%	59 1.7%	10 0.3%	2 0.1%	12 0.4%	30-34 μg
01/02	186 6.6%	351 12.5%	298 10.6%	347 12.3%	348 12.4%	381 13.5%	1911 67.9%	564 20.0%	300 10.7%	40 1.4%	1 0.0%	0 0.0%	1 0.0%	30-34 μg
02/03	202 8.0%	302 (1) 11.9%	268 10.6%	347 13.7%	291 11.5%	308 12.2%	1718 (1) 67.9%	484 19.1%	253 10.0%	56 2.2%	13 0.5%	5 0.2%	18 0.7%	30-34 μg
03/04	373 (1) 15.4%	318 (1) 13.1%	266 11.0%	268 11.1%	270 11.1%	262 10.8%	1757 (2) 72.5%	423 17.4%	199 8.2%	36 1.5%	9 0.4%	1 0.0%	10 0.4%	25-29 μg
04/05	184 9.5%	282 14.5%	220 (1) 11.3%	233 12.0%	240 12.4%	223 11.5%	1382 (1) 71.2%	358 18.4%	163 8.4%	32 1.6%	6 0.3%	1 0.1%	7 0.4%	30-34 μg
05/06	226 11.3%	252 12.6%	190 9.5%	203 10.2%	218 10.9%	240 12.0%	1329 66.5%	420 21.0%	204 10.2%	36 1.8%	7 0.4%	1 0.1%	8 0.4%	30-34 μg
06/07	341 17.8%	254 13.3%	153 8.0%	198 10.3%	196 10.2%	218 11.4%	1360 71.1%	379 19.8%	141 7.4%	27 1.4%	4 0.2%	3 0.2%	7 0.4%	30-34 μg
07/08	432 (1) 38.8%	155 13.9%	102 9.2%	111 10.0%	82 7.4%	84 7.5%	966 (1) 86.8%	102 9.2%	41 3.7%	4 0.4%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
08/09	216 (1) 18.8%	249 21.7%	189 (1) 16.5%	137 (1) 11.9%	127 11.1%	76 6.6%	994 (3) 86.7%	110 9.6%	37 3.2%	4 0.3%	2 0.2%	0 0.0%	2 0.2%	20-24 μg
09/10	233 18.5%	280 22.2%	184 14.6%	170 13.5%	119 9.4%	111 8.8%	1097 87.0%	131 10.4%	28 2.2%	3 0.2%	1 0.1%	1 0.1%	2 0.2%	20-24 μg

Table 8 The breakdown of female lead workers under medical surveillance in the lead battery industry, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year
(Figures are for the total number of female workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	<25 μg	25-29 μg	30-34 μg	35-39 μg	30-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	>40 μg	Median range
92/93									81 78.6%	12 11.7%	8 7.8%	1 1.0%	1 1.0%	0 0.0%	22 21.4%	<40 μg
93/94									80 77.7%	9 8.7%	7 6.8%	3 2.9%	2 1.9%	2 1.9%	23 22.3%	<40 μg
94/95									110 80.9%	17 12.5%	4 2.9%	4 2.9%	1 0.7%	0 0.0%	26 19.1%	<40 μg
95/96									134 84.3%	16 10.1%	4 2.5%	3 1.9%	2 1.3%	0 0.0%	25 15.7%	<40 μg
96/97	85 54.8%	18 11.6%	103 66.5%	15 9.7%	12 7.7%	9 5.8%	21 13.5%	139 89.7%	10 6.5%	4 2.6%	1 0.6%	1 0.6%	0 0.0%	0 0.0%	16 10.3%	<20 μg
97/98	82 57.7%	16 11.3%	98 69.0%	17 12.0%	15 10.6%	4 2.8%	19 13.4%	134 94.4%	5 3.5%	3 2.1%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	8 5.6%	<20 μg
98/99*	13 13.7%	26 27.4%	15 15.8%	54 56.8%	11 11.6%	12 12.6%	8 8.4%	20 21.1%	85 89.5%	9 9.5%	1 1.1%	0 0.0%	0 0.0%	0 0.0%	10 10.5%	20-24 μg
99/00	23 23.2%	38 38.4%	14 14.1%	75 75.8%	16 16.2%	4 4.0%	1 1.0%	5 5.1%	96 97.0%	3 3.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	3 3.0%	10-19 μg
00/01	13 (2) 13.0%	39 39.0%	19 19.0%	71 (2) 71.0%	18 18.0%	7 7.0%	1 1.0%	8 8.0%	97 (2) 97.0%	3 3.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	3 3.0%	10-19 μg
01/02	28 33.7%	23 27.7%	12 14.5%	63 75.9%	11 13.3%	6 7.2%	2 2.4%	8 9.6%	82 98.8%	0 0.0%	1 1.2%	0 0.0%	0 0.0%	0 0.0%	1 1.2%	10-19 μg
02/03	20 26.7%	25 33.3%	11 14.7%	56 74.7%	11 14.7%	4 5.3%	4 5.3%	8 10.7%	75 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
03/04	26 33.3%	17 21.8%	12 15.4%	55 70.5%	12 15.4%	6 7.7%	3 3.8%	9 11.5%	76 97.4%	2 2.6%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	2 2.6%	10-19 μg
04/05	30 40.5%	15 20.3%	13 17.6%	58 78.4%	7 9.5%	6 8.1%	3 4.1%	9 12.2%	74 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
05/06	18 31.0%	17 29.3%	9 15.5%	44 75.9%	6 10.3%	5 8.6%	2 3.4%	7 12.1%	57 98.3%	1 1.7%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 1.7%	10-19 μg
06/07	36 56.3%	10 15.6%	8 12.5%	54 84.4%	7 10.9%	1 1.6%	2 3.1%	3 4.7%	64 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
07/08	48 60.8%	14 17.7%	7 8.9%	69 87.3%	7 8.9%	2 2.5%	0 0.0%	2 2.5%	78 98.7%	1 1.3%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 1.3%	<10 μg
08/09	45 61.6%	13 17.8%	5 6.8%	63 86.3%	6 8.2%	1 1.4%	3 4.1%	4 5.5%	73 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
09/10	20 51.3%	10 25.6%	3 7.7%	33 84.6%	3 7.7%	1 2.6%	2 5.1%	3 7.7%	39 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg

Workers under medical surveillance in the badge and jewellery enamelling sector

Table 9 The breakdown of male lead workers under medical surveillance in the badge and jewellery enamelling sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year (Figures are for the total number of male workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	25-29 μg	30-34 μg	35-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	70+ μg	Median range
92/93							91 92.9%	2 2.0%	3 3.1%	2 2.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
93/94							43 75.4%	12 21.1%	2 3.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
94/95							37 92.5%	2 5.0%	1 2.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
95/96							19 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
96/97	12 35.3%	2 5.9%	6 17.6%	4 11.8%	1 2.9%	25 73.5%	8 23.5%	1 2.9%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	25-29 μg
97/98	8 80.0%	0 0.0%	1 10.0%	1 10.0%	0 0.0%	10 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<20 μg
98/99*	1 8.3%	2 16.7%	7 58.3%	0 0.0%	2 16.7%	0 0.0%	12 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	20-24 μg
99/00	6 (1) 54.5%	3 27.3%	1 9.1%	0 0.0%	0 0.0%	0 0.0%	10 (1) 90.9%	0 0.0%	1 9.1%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
00/01	16 (1) 88.9%	0 0.0%	1 5.6%	0 0.0%	0 0.0%	1 5.6%	18 (1) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
01/02	7 (1) 36.8%	5 26.3%	2 10.5%	1 5.3%	1 5.3%	3 15.8%	19 (1) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
02/03	1 7.7%	5 38.5%	2 15.4%	1 7.7%	2 15.4%	1 7.7%	12 92.3%	0 0.0%	1 7.7%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	20-24 μg
03/04	1 10.0%	3 30.0%	0 0.0%	1 10.0%	0 0.0%	3 30.0%	8 80.0%	2 20.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	25-29 μg
04/05	2 22.2%	2 22.2%	2 22.2%	1 11.1%	0 0.0%	1 11.1%	8 88.9%	1 11.1%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	20-24 μg
05/06	3 30.0%	6 60.0%	1 10.0%	0 0.0%	0 0.0%	0 0.0%	10 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
06/07	8 38.1%	9 42.9%	3 14.3%	0 0.0%	0 0.0%	0 0.0%	20 95.2%	1 4.8%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
07/08	1 33.3%			0 0.0%	0 0.0%	0 0.0%	1 33.3%	2 66.6%		0 0.0%	0 0.0%	0 0.0%	0 0.0%	40-59 μg
08/09	No males under medical surveillance													
09/10	No males under medical surveillance													

Table 10 The breakdown of female lead workers under medical surveillance in the badge and jewellery enamelling sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year

Year	<10 μg	10-19 μg	20-24 μg	<25 μg	25-29 μg	30-34 μg	35-39 μg	30-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	>40 μg	Median range	
92/93									46 90.2%	4 7.8%	0 0.0%	1 2.0%	0 0.0%	0 0.0%	5 9.8%	<40 μg	
93/94									24 88.9%	3 11.1%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	3 11.1%	<40 μg	
94/95									20 87.0%	2 8.7%	1 4.3%	0 0.0%	0 0.0%	0 0.0%	3 13.0%	<40 μg	
95/96									13 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg	
96/97	24 88.9%	3 11.1%	27 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	27 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<20 μg	
97/98	8 66.7%	2 16.7%	10 83.3%	1 8.3%	1 8.3%	0 0.0%	1 8.3%	12 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<20 μg	
98/99*	3 100.0%			3 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	3 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg	
99/00	2 100.0%			2 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	2 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg	
00/01	No females under medical surveillance																
01/02	4 100.0%			4 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	4 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
02/03	4 100.0%			4 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	4 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
03/04	2 100.0%			2 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	2 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
04/05	6 100.0%			6 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	6 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
05/06	4 100.0%			4 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	4 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
06/07	7 70.0%	3 30.0%	0 0.0%	10 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
07/08	No females under medical surveillance																
08/09	No females under medical surveillance																
09/10	No females under medical surveillance																

Workers under medical surveillance in the glass making sector

Table 11 The breakdown of male lead workers under medical surveillance in the glass making sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year
(Figures are for the total number of male workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	25-29 μg	30-34 μg	35-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	70+ μg	Median range
92/93							671 70.5%	164 17.2%	80 8.4%	31 3.3%	4 0.4%	2 0.2%	6 0.6%	<40 μg
93/94							687 70.8%	172 17.7%	65 6.7%	26 2.7%	15 1.5%	6 0.6%	21 2.2%	<40 μg
94/95							599 79.1%	97 12.8%	48 6.3%	10 1.3%	3 0.4%	0 0.0%	3 0.4%	<40 μg
95/96							650 84.2%	73 9.5%	37 4.8%	10 1.3%	2 0.3%	0 0.0%	2 0.3%	<40 μg
96/97	444 45.2%	140 14.2%	132 13.4%	106 10.8%	75 7.6%	897 91.3%	64 6.5%	14 1.4%	6 0.6%	2 0.2%	0 0.0%	2 0.2%	20-24 μg	
97/98	421 46.1%	123 13.5%	123 13.5%	101 11.1%	52 5.7%	820 89.7%	69 7.5%	20 2.2%	4 0.4%	1 0.1%	0 0.0%	1 0.1%	20-24 μg	
98/99*	153 (10) 16.1%	274 (7) 28.8%	141 (2) 14.8%	140 (2) 14.7%	96 10.1%	76 8.0%	880 (21) 92.6%	47 4.9%	17 1.8%	6 0.6%	0 0.0%	0 0.0%	0 0.0%	20-24 μg
99/00	138 (11) 17.7%	215 (3) 27.6%	123 15.8%	104 (1) 13.4%	66 8.5%	59 7.6%	705 (15) 90.5%	46 5.9%	21 2.7%	5 0.6%	2 0.3%	0 0.0%	2 0.3%	20-24 μg
00/01	111 (4) 17.1%	185 (3) 28.4%	119 (1) 18.3%	72 11.1%	51 7.8%	44 6.8%	582 (8) 89.4%	54 8.3%	13 2.0%	2 0.3%	0 0.0%	0 0.0%	0 0.0%	20-24 μg
01/02	199 (1) 28.2%	213 (1) 30.2%	91 12.9%	70 9.9%	46 (1) 6.5%	37 5.2%	656 (3) 93.0%	38 5.4%	7 1.0%	4 0.6%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
02/03	289 (3) 42.6%	162 (1) 23.9%	55 8.1%	55 8.1%	33 4.9%	37 5.4%	631 (4) 92.9%	37 5.4%	10 1.5%	0 0.0%	1 0.1%	0 0.0%	1 0.1%	10-19 μg
03/04	121 23.3%	178 (1) 34.3%	52 (1) 10.0%	57 11.0%	43 8.3%	28 5.4%	479 (2) 92.3%	29 5.6%	9 1.7%	1 0.2%	1 0.2%	0 0.0%	1 0.2%	10-19 μg
04/05	241 (9) 45.6%	103 19.5%	43 (1) 8.1%	53 10.0%	26 4.9%	21 4.0%	487 (10) 92.1%	34 6.4%	8 1.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
05/06	30 12.7%	51 21.5%	45 19.0%	35 (1) 14.8%	25 10.5%	26 11.0%	212 (1) 89.5%	19 8.0%	6 2.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	20-24 μg
06/07	80 26.8%	103 34.6%	44 14.8%	25 8.4%	20 6.7%	13 4.4%	285 95.6%	7 2.3%	6 2.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
07/08	90 15.5%	77 13.2%	21 3.6%	25 4.3%	23 4.0%	237 40.7%	473 81.3%	79 13.6%	29 5.0%	1 0.2%	0 0.0%	0 0.0%	0 0.0%	35-39 μg
08/09	86 14.3%	112 18.6%	68 11.3%	75 12.5%	77 12.8%	62 10.3%	480 79.7%	92 15.3%	30 5.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	25-29 μg
09/10	38 22.9%	41 24.7%	21 12.7%	22 13.3%	20 12.0%	12 7.2%	154 92.8%	9 5.4%	3 1.8%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	20-24 μg

Table 12 The breakdown of female lead workers under medical surveillance in the glass making sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year
(Figures are for the total number of female workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	<25 μg	25-29 μg	30-34 μg	35-39 μg	30-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	>40 μg	Median range	
92/93									154 97.5%	3 1.9%	1 0.6%	0 0.0%	0 0.0%	0 0.0%	4 2.5%	<40 μg	
93/94									170 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
94/95									158 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
95/96									150 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
96/97	106 77.4%		16 11.7%	122 89.1%	10 7.3%	5 3.6%	0 0.0%	5 3.6%	137 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<20 μg
97/98	86 82.7%		10 9.6%	96 92.3%	3 2.9%	5 4.8%	0 0.0%	5 4.8%	104 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<20 μg
98/99*	43 (2) 38.7%	53 47.7%	10 9.0%	106 (2) 95.5%	3 2.7%	0 0.0%	2 1.8%	2 1.8%	111 (2) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
99/00	59 (5) 46.8%	56 (1) 44.4%	8 6.3%	123 (6) 97.6%	2 1.6%	1 0.8%	0 0.0%	1 0.8%	126 (6) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
00/01	28 35.4%	30 (1) 38.0%	10 12.7%	68 (1) 86.1%	6 7.6%	3 3.8%	2 2.5%	5 6.3%	79 (1) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
01/02	27 54.0%	14 28.0%	3 6.0%	44 88.0%	3 6.0%	2 4.0%	0 0.0%	2 4.0%	49 98.0%	1 2.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 2.0%	<10 μg
02/03	39 (1) 66.1%	13 22.0%	3 5.1%	55 (1) 93.2%	3 5.1%	1 1.7%	0 0.0%	1 1.7%	59 (1) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
03/04	28 (1) 63.6%	12 27.3%	0 0.0%	40 (1) 90.9%	3 6.8%	0 0.0%	1 2.3%	1 2.3%	44 (1) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
04/05	28 68.3%	9 22.0%	2 4.9%	39 95.1%	2 4.9%	0 0.0%	0 0.0%	0 0.0%	41 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
05/06	24 63.2%	8 21.1%	4 10.5%	36 94.7%	1 2.6%	1 2.6%	0 0.0%	1 2.6%	38 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
06/07	18 56.3%	11 34.4%	1 3.1%	30 93.8%	1 3.1%	1 3.1%	0 0.0%	1 3.1%	32 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
07/08	7 58.3%	2 16.7%	2 16.7%	11 91.7%	0 0.0%	0 0.0%	1 8.3%	1 8.3%	12 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
08/09	12 (1) 60.0%	6 30.0%	2 (1) 10.0%	20 (2) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	20 (2) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
09/10	31 73.8%	10 23.8%	1 2.4%	42 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	42 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg

Workers under medical surveillance in the manufacture of pigments and colours sector

Table 13 The breakdown of male lead workers under medical surveillance in the manufacture of pigments and colours sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year (Figures are for the total number of male workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	25-29 μg	30-34 μg	35-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	70+ μg	Median range
92/93							518 91.7%	29 5.1%	9 1.6%	7 1.2%	2 0.4%	0 0.0%	2 0.4%	<40 μg
93/94							438 93.0%	22 4.7%	7 1.5%	3 0.6%	1 0.2%	0 0.0%	1 0.2%	<40 μg
94/95							422 94.6%	18 4.0%	5 1.1%	0 0.0%	1 0.2%	0 0.0%	1 0.2%	<40 μg
95/96							592 94.0%	27 4.3%	10 1.6%	1 0.2%	0 0.0%	0 0.0%	0 0.0%	<40 μg
96/97	294 67.3%	47 10.8%	23 5.3%	31 7.1%	16 3.7%	411 94.1%	21 4.8%	5 1.1%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<20 μg
97/98	403 77.2%	32 6.1%	28 5.4%	22 4.2%	15 2.9%	500 95.8%	20 3.8%	2 0.4%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<20 μg
98/99*	323 (3) 52.3%	158 25.6%	44 7.1%	38 6.1%	19 3.1%	17 2.8%	599 (3) 96.9%	13 2.1%	6 1.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
99/00	223 52.7%	113 (1) 26.7%	34 8.0%	15 3.5%	14 3.3%	13 3.1%	412 (1) 97.4%	8 1.9%	2 0.5%	1 0.2%	0 0.0%	0 0.0%	0 0.0%	<10 μg
00/01	280 50.5%	184 33.2%	35 6.3%	17 3.1%	13 2.3%	10 1.8%	539 97.3%	13 2.3%	2 0.4%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
01/02	279 51.6%	155 28.7%	22 4.1%	33 6.1%	18 3.3%	12 2.2%	519 95.9%	15 2.8%	5 0.9%	2 0.4%	0 0.0%	0 0.0%	0 0.0%	<10 μg
02/03	285 47.2%	163 27.0%	42 7.0%	36 6.0%	34 5.6%	22 3.6%	582 96.4%	18 3.0%	3 0.5%	0 0.0%	1 0.2%	0 0.0%	1 0.2%	10-19 μg
03/04	173 38.4%	130 28.8%	43 9.5%	38 8.4%	24 5.3%	30 6.7%	438 97.1%	9 2.0%	3 0.7%	0 0.0%	1 0.2%	0 0.0%	1 0.2%	10-19 μg
04/05	246 59.3%	86 20.7%	25 6.0%	21 5.1%	19 4.6%	11 2.7%	408 98.3%	5 1.2%	2 0.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
05/06	103 75.2%	13 9.5%	6 4.4%	4 2.9%	5 3.6%	3 2.2%	134 97.8%	3 2.2%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
06/07	33 55.9%	4 6.8%	3 5.1%	4 6.8%	3 5.1%	3 5.1%	50 84.7%	8 13.6%	1 1.7%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
07/08	15 25.4%	19 32.2%	5 8.5%	9 15.3%	1 1.7%	3 5.1%	52 88.1%	5 8.5%	2 3.4%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
08/09	30 28.6%	34 32.4%	8 7.6%	6 5.7%	11 10.5%	5 4.8%	94 89.5%	7 6.7%	3 2.9%	1 1.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
09/10	24 24.0%	48 48.0%	8 8.0%	8 8.0%	3 3.0%	3 3.0%	94 94.0%	5 5.0%	1 1.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg

Table 14 The breakdown of female lead workers under medical surveillance in the manufacture of pigments and colours sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year (Figures are for the total number of female workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	<25 μg	25-29 μg	30-34 μg	35-39 μg	30-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	>40 μg	Median range
92/93									71 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
93/94									57 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
94/95									53 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
95/96									54 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
96/97	30 85.7%		3 8.6%	33 94.3%	2 5.7%	0 0.0%	0 0.0%	0 0.0%	35 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<20 μg
97/98	26 86.7%		3 10.0%	29 96.7%	0 0.0%	1 3.3%	0 0.0%	1 3.3%	30 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<20 μg
98/99*	20 76.9%	5 19.2%	0 0.0%	25 96.2%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	25 96.2%	1 3.8%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 3.8%	<10 μg
99/00	31 91.2%	0 0.0%	3 8.8%	34 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	34 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
00/01	19 82.6%	1 4.3%	2 8.7%	22 95.7%	1 4.3%	0 0.0%	0 0.0%	0 0.0%	23 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
01/02	11 61.1%	4 22.2%	2 11.1%	17 94.4%	1 5.6%	0 0.0%	0 0.0%	0 0.0%	18 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
02/03	14 66.7%	7 33.3%	0 0.0%	21 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	21 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
03/04	12 50.0%	9 37.5%	2 8.3%	23 95.8%	1 4.2%	0 0.0%	0 0.0%	0 0.0%	24 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
04/05	18 85.7%	3 14.3%	0 0.0%	21 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	21 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
05/06	11 100.0%			11 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	11 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
06/07	3 100.0%			3 (2) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	3 (2) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
07/08	3 100.0%			3 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	3 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
08/09	3 100.0%			3 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	3 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
09/10	No females under medical surveillance															

Workers under medical surveillance in the potteries, glazes and transfers sector

Table 15 The breakdown of male lead workers under medical surveillance in the potteries, glazes and transfers sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year (Figures are for the total number of male workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	25-29 μg	30-34 μg	35-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	70+ μg	Median range
92/93							249 87.1%	22 7.7%	11 3.8%	4 1.4%	0 0.0%	0 0.0%	0 0.0%	<40 μg
93/94							279 77.1%	62 17.1%	18 5.0%	2 0.6%	0 0.0%	1 0.3%	1 0.3%	<40 μg
94/95							261 89.1%	18 6.1%	10 3.4%	4 1.4%	0 0.0%	0 0.0%	0 0.0%	<40 μg
95/96							282 92.5%	12 3.9%	9 3.0%	2 0.7%	0 0.0%	0 0.0%	0 0.0%	<40 μg
96/97	104 52.5%		25 12.6%	25 12.6%	19 9.6%	8 4.0%	181 91.4%	11 5.6%	4 2.0%	2 1.0%	0 0.0%	0 0.0%	0 0.0%	<20 μg
97/98	108 54.5%		25 12.6%	24 12.1%	13 6.6%	11 5.6%	181 91.4%	8 4.0%	6 3.0%	2 1.0%	0 0.0%	1 0.5%	1 0.5%	<20 μg
98/99*	25 18.5%	45 33.3%	28 20.7%	9 6.7%	12 8.9%	7 5.2%	126 93.3%	8 5.9%	1 0.7%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
99/00	43 (2) 21.1%	93 45.6%	23 11.3%	17 8.3%	10 4.9%	5 2.5%	191 (2) 93.6%	8 3.9%	5 2.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
00/01	74 (2) 38.9%	67 35.3%	16 8.4%	12 6.3%	10 5.3%	4 2.1%	183 (2) 96.3%	5 2.6%	1 0.5%	1 0.5%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
01/02	82 39.2%	72 34.4%	19 9.1%	12 5.7%	8 3.8%	3 1.4%	196 93.8%	12 5.7%	1 0.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
02/03	62 40.0%	50 32.3%	8 5.2%	8 5.2%	7 (1) 4.5%	6 3.9%	141 (1) 91.0%	10 6.5%	2 1.3%	1 0.6%	1 0.6%	0 0.0%	1 0.6%	10-19 μg
03/04	58 41.1%	31 22.0%	12 8.5%	10 7.1%	12 8.5%	6 4.3%	129 91.5%	8 5.7%	1 0.7%	2 1.4%	1 0.7%	0 0.0%	1 0.7%	10-19 μg
04/05	40 37.0%	31 28.7%	6 5.6%	7 6.5%	12 11.1%	8 7.4%	104 96.3%	3 2.8%	1 0.9%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
05/06	29 46.8%	11 17.7%	7 11.3%	6 9.7%	4 6.5%	5 8.1%	62 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
06/07	42 51.9%	14 17.3%	11 13.6%	8 9.9%	6 7.4%	0 0.0%	81 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
07/08	27 54.0%	7 14.0%	6 12.0%	6 12.0%	3 6.0%	0 0.0%	49 98.0%	1 2.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
08/09	0 0.0%	3 18.8%	3 18.8%	6 37.5%	3 18.8%	1 6.3%	16 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	25-29 μg
09/10	2 10.5%	9 47.4%	4 21.1%	1 5.3%	1 5.3%	2 10.5%	19 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg

Table 16 The breakdown of female lead workers under medical surveillance in the potteries, glazes and transfers sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year (Figures are for the total number of female workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	<25 μg	25-29 μg	30-34 μg	35-39 μg	30-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	>40 μg	Median range
92/93									174 97.2%	4 2.2%	0 0.0%	1 0.6%	0 0.0%	0 0.0%	5 2.8%	<40 μg
93/94									165 98.2%	2 1.2%	1 0.6%	0 0.0%	0 0.0%	0 0.0%	3 1.8%	<40 μg
94/95									155 98.7%	2 1.3%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	2 1.3%	<40 μg
95/96									247 99.6%	1 0.4%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 0.4%	<40 μg
96/97	138 81.2%	18 10.6%	156 91.8%	8 4.7%	4 2.4%	2 1.2%	6 3.5%	170 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<20 μg
97/98	154 86.5%	17 9.6%	171 96.1%	2 1.1%	2 1.1%	2 1.1%	4 2.2%	177 99.4%	1 0.6%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 0.6%	<20 μg
98/99*	50 (1) 53.8%	31 33.3%	7 7.5%	88 (1) 94.6%	2 2.2%	1 1.1%	2 2.2%	3 3.2%	93 (1) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
99/00	72 40.7%	84 47.5%	14 7.9%	170 96.0%	3 1.7%	3 1.7%	1 0.6%	4 2.3%	177 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
00/01	91 (2) 56.9%	56 35.0%	4 2.5%	151 (2) 94.4%	3 1.9%	4 2.5%	1 0.6%	5 3.1%	159 (2) 99.4%	0 0.0%	1 0.6%	0 0.0%	0 0.0%	0 0.0%	1 0.6%	<10 μg
01/02	88 50.6%	64 36.8%	6 3.4%	158 90.8%	9 5.2%	4 2.3%	0 0.0%	4 2.3%	171 98.3%	3 1.7%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	3 1.7%	<10 μg
02/03	69 63.3%	33 30.3%	3 2.8%	105 96.3%	1 0.9%	1 0.9%	2 1.8%	3 2.8%	109 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
03/04	48 61.5%	18 (1) 23.1%	5 6.4%	71 (1) 91.0%	1 (1) 1.3%	3 3.8%	3 3.8%	6 7.7%	78 (2) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
04/05	51 68.9%	10 13.5%	7 9.5%	68 91.9%	3 4.1%	2 2.7%	1 1.4%	3 4.1%	74 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
05/06	30 85.7%	3 8.6%	1 2.9%	34 97.1%	0 0.0%	1 2.9%	0 0.0%	1 2.9%	35 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
06/07	16 80.0%	1 5.0%	3 15.0%	20 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	20 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
07/08	10 76.9%	1 7.7%	2 15.4%	13 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	13 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
08/09	13 68.4%	4 21.1%	2 10.5%	19 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	19 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
09/10	6 85.7%	1 14.3%	0 0.0%	7 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	7 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg

Workers under medical surveillance in the manufacture of inorganic and organic compounds sector

Table 17 The breakdown of male lead workers under medical surveillance in the manufacture of inorganic and organic compounds sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year (Figures are for the total number of male workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	25-29 μg	30-34 μg	35-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	70+ μg	Median range
92/93							2332 95.7%	64 2.6%	26 1.1%	15 0.6%	1 0.0%	0 0.0%	1 0.0%	<40 μg
93/94							1583 96.4%	49 3.0%	5 0.3%	5 0.3%	0 0.0%	0 0.0%	0 0.0%	<40 μg
94/95							1046 90.5%	70 6.1%	20 1.7%	8 0.7%	11 1.0%	1 0.1%	12 1.0%	<40 μg
95/96							954 97.3%	23 2.3%	3 0.3%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
96/97	1171 64.2%	174 9.5%	148 8.1%	127 7.0%	79 4.3%	1699 93.1%	91 5.0%	28 1.5%	5 0.3%	2 0.1%	0 0.0%	2 0.1%	<20 μg	
97/98	1337 64.1%	192 9.2%	174 8.3%	114 5.5%	102 4.9%	1919 92.0%	110 5.3%	38 1.8%	10 0.5%	3 0.1%	7 0.3%	10 0.5%	<20 μg	
98/99*	382 30.1%	313 24.6%	155 12.2%	122 9.6%	105 8.3%	71 5.6%	1148 90.3%	78 6.1%	37 2.9%	6 0.5%	2 0.2%	0 0.0%	2 0.2%	10-19 μg
99/00	503 35.1%	347 24.2%	152 10.6%	143 10.0%	97 6.8%	82 5.7%	1324 92.3%	87 6.1%	21 1.5%	2 0.1%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
00/01	483 (3) 40.5%	259 21.7%	115 9.6%	100 8.4%	82 6.9%	59 4.9%	1098 (3) 92.0%	74 6.2%	17 1.4%	2 0.2%	3 0.3%	0 0.0%	3 0.3%	10-19 μg
01/02	475 39.2%	284 23.4%	105 8.7%	107 8.8%	91 7.5%	61 5.0%	1123 92.6%	57 4.7%	24 2.0%	8 0.7%	1 0.1%	0 0.0%	1 0.1%	10-19 μg
02/03	264 30.1%	195 22.3%	115 13.1%	81 9.2%	80 9.1%	54 6.2%	789 90.1%	65 7.4%	16 1.8%	3 0.3%	2 0.2%	1 0.1%	3 0.3%	10-19 μg
03/04	273 32.2%	224 26.4%	87 10.3%	64 7.6%	67 7.9%	52 6.1%	767 90.6%	53 6.3%	23 2.7%	4 0.5%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
04/05	260 31.0%	226 27.0%	98 11.7%	78 9.3%	75 8.9%	47 5.6%	784 93.6%	44 5.3%	8 1.0%	2 0.2%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
05/06	179 39.2%	129 28.2%	54 11.8%	37 8.1%	32 7.0%	12 2.6%	443 96.9%	12 2.6%	2 0.4%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
06/07	209 38.6%	119 22.0%	65 12.0%	46 8.5%	45 8.3%	22 4.1%	506 93.5%	28 5.2%	7 1.3%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
07/08	117 16.1%	127 17.5%	75 10.3%	78 10.7%	87 12.0%	100 13.8%	584 80.4%	76 10.5%	55 7.6%	10 1.4%	1 0.1%	0 0.0%	1 0.1%	25-29 μg
08/09	160 39.4%	107 26.4%	38 9.4%	27 6.7%	32 7.9%	23 5.7%	387 95.3%	17 4.2%	2 0.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
09/10	146 54.1%	57 21.1%	28 10.4%	14 5.2%	12 4.4%	4 1.5%	261 96.7%	9 3.3%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg

Table 18 The breakdown of female lead workers under medical surveillance in the manufacture of inorganic and organic compounds sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year

Year	<10 μg	10-19 μg	20-24 μg	<25 μg	25-29 μg	30-34 μg	35-39 μg	30-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	>40 μg	Median range
92/93									182	0	0	0	0	0	0	<40 μg
									100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
93/94									1	0	0	0	0	0	0	<40 μg
									100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
94/95									6	0	0	0	0	0	0	<40 μg
									100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
95/96									13	0	0	0	0	0	0	<40 μg
									100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
96/97	107		0	107	1	0	0	0	108	0	0	0	0	0	0	<20 μg
	99.1%		0.0%	99.1%	0.9%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
97/98	40		2	42	0	0	0	0	42	0	0	0	0	0	0	<20 μg
	95.2%		4.8%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
98/99*	33	11	0	44	0	0	0	0	44	0	0	0	0	0	0	<10 μg
	75.0%	25.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
99/00	22	3	0	25	0	0	0	0	25	0	1	0	0	0	1	<10 μg
	84.6%	11.5%	0.0%	96.2%	0.0%	0.0%	0.0%	0.0%	96.2%	0.0%	3.8%	0.0%	0.0%	0.0%	3.8%	
00/01	28	3	1	32	1	0	0	0	33	0	0	0	0	0	0	<10 μg
	84.8%	9.1%	3.0%	97.0%	3.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
01/02	12	1	0	13	1	1	0	1	15	0	0	0	0	0	0	<10 μg
	80.0%	6.7%	0.0%	86.7%	6.7%	6.7%	0.0%	6.7%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
02/03	23	4	4	31	1	1	0	1	33	0	0	0	0	0	0	<10 μg
	69.7%	12.1%	12.1%	93.9%	3.0%	3.0%	0.0%	3.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
03/04	23	4	0	27	0	0	0	0	27	0	0	0	0	0	0	<10 μg
	85.2%	14.8%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
04/05	24	6	0	30	0	0	0	0	30	0	0	0	0	0	0	<10 μg
	80.0%	20.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
05/06	11	4	1	16	1	0	0	0	17	0	0	0	0	0	0	<10 μg
	64.7%	23.5%	5.9%	94.1%	5.9%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
06/07	14	2	0	16	0	0	0	0	16	0	0	0	0	0	0	<10 μg
	87.5%	12.5%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
07/08	11	2	0	13	0	0	0	0	13	0	0	0	0	0	0	<10 μg
	84.6%	15.4%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
08/09	14	2	0	16	0	0	0	0	16	0	0	0	0	0	0	<10 μg
	87.5%	12.5%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
09/10	No females under medical surveillance															

Workers under medical surveillance in the shipbuilding, repairing and breaking sector

Table 19 The breakdown of male lead workers under medical surveillance in the shipbuilding, repairing and breaking sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year (Figures are for the total number of male workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	25-29 μg	30-34 μg	35-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	70+ μg	Median range
92/93							94 94.9%	4 4.0%	0 0.0%	1 1.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
93/94							131 92.9%	9 6.4%	1 0.7%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
94/95							141 94.6%	7 4.7%	1 0.7%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
95/96							118 97.5%	3 2.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
96/97	101 67.8%	10 6.7%	15 10.1%	5 3.4%	8 5.4%		139 93.3%	7 4.7%	1 0.7%	2 1.3%	0 0.0%	0 0.0%	0 0.0%	<20 μg
97/98	114 89.1%	5 3.9%	3 2.3%	2 1.6%	1 0.8%		125 97.7%	1 0.8%	1 0.8%	1 0.8%	0 0.0%	0 0.0%	0 0.0%	<20 μg
98/99*	56 43.8%	52 40.6%	7 5.5%	3 2.3%	4 3.1%	1 0.8%	123 96.1%	0 0.0%	1 0.8%	4 3.1%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
99/00	124 53.7%	65 28.1%	7 3.0%	16 6.9%	2 0.9%	5 2.2%	219 94.8%	9 3.9%	2 0.9%	1 0.4%	0 0.0%	0 0.0%	0 0.0%	<10 μg
00/01	71 82.6%	10 11.6%	1 1.2%	1 1.2%	0 0.0%	0 0.0%	83 96.5%	1 1.2%	2 2.3%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
01/02	21 77.8%	3 11.1%	0 0.0%	0 0.0%	0 0.0%	1 3.7%	25 92.6%	1 3.7%	1 3.7%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
02/03	58 74.4%	5 6.4%	7 9.0%	2 2.6%	2 2.6%	2 2.6%	76 97.4%	0 0.0%	1 1.3%	1 1.3%	0 0.0%	0 0.0%	0 0.0%	<10 μg
03/04	128 (3) 87.7%	10 6.8%	2 1.4%	1 0.7%	0 0.0%	0 0.0%	141 (3) 96.6%	3 2.1%	1 0.7%	0 0.0%	1 0.7%	0 0.0%	1 0.7%	<10 μg
04/05	14 60.9%	3 13.0%	0 0.0%	0 0.0%	2 8.7%	0 0.0%	19 82.6%	2 8.7%	2 8.7%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
05/06	16 36.4%	8 18.2%	9 20.5%	6 13.6%	1 2.3%	0 0.0%	40 90.9%	4 9.1%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
06/07	28 82.4%	1 2.9%	1 2.9%	0 0.0%	0 0.0%	0 0.0%	30 88.2%	1 2.9%	2 5.9%	1 2.9%	0 0.0%	0 0.0%	0 0.0%	<10 μg
07/08	21 75.0%	1 3.6%	1 3.6%	1 3.6%	0 0.0%	0 0.0%	24 85.7%	3 10.7%	1 3.6%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
08/09	54 79.4%	6 8.8%	2 2.9%	0 0.0%	1 1.5%	0 0.0%	63 92.6%	3 4.4%	2 2.9%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
09/10	93 94.9%	1 1.0%	2 2.0%	0 0.0%	1 1.0%	1 1.0%	98 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg

Table 20 The breakdown of female lead workers under medical surveillance in the shipbuilding, repairing and breaking sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year

Year	<10 μg	10-19 μg	20-24 μg	<25 μg	25-29 μg	30-34 μg	35-39 μg	30-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	>40 μg	Median range	
92/93	No females under medical surveillance																
93/94	No females under medical surveillance																
94/95									1	0	0	0	0	0	0	0	<40 μg
									100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
95/96	No females under medical surveillance																
96/97	No females under medical surveillance																
97/98	No females under medical surveillance																
98/99*	No females under medical surveillance																
99/00	No females under medical surveillance																
00/01	No females under medical surveillance																
01/02	No females under medical surveillance																
02/03	No females under medical surveillance																
03/04	No females under medical surveillance																
04/05	No females under medical surveillance																
05/06	No females under medical surveillance																
06/07	No females under medical surveillance																
07/08	No females under medical surveillance																
08/09	16	3	2	21	0	0	0	0	21	0	0	0	0	0	0	<10 μg	
	76.2%	14.3%	9.5%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
09/10	No females under medical surveillance																

Workers under medical surveillance in the demolition sector

Table 21 The breakdown of male lead workers under medical surveillance in the demolition sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year

Year	<10 μg	10-19 μg	20-24 μg	25-29 μg	30-34 μg	35-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	70+ μg	Median range
92/93							493 75.8%	73 11.2%	45 6.9%	21 3.2%	13 2.0%	5 0.8%	18 2.8%	<40 μg
93/94							366 75.6%	65 13.4%	27 5.6%	18 3.7%	6 1.2%	2 0.4%	8 1.7%	<40 μg
94/95							496 72.7%	84 12.3%	49 7.2%	31 4.5%	14 2.1%	8 1.2%	22 3.2%	<40 μg
95/96							322 70.9%	52 11.5%	28 6.2%	17 3.7%	14 3.1%	21 4.6%	35 7.7%	<40 μg
96/97	134 30.7%	40 9.2%	50 11.5%	41 9.4%	46 10.6%	311 71.3%	45 10.3%	39 8.9%	28 6.4%	9 2.1%	4 0.9%	13 3.0%	25-29 μg	
97/98	189 38.0%	48 9.7%	50 10.1%	52 10.5%	29 5.8%	368 74.0%	60 12.1%	37 7.4%	19 3.8%	6 1.2%	7 1.4%	13 2.6%	25-29 μg	
98/99*	170 41.3%	72 17.5%	33 8.0%	34 8.3%	33 8.0%	18 4.4%	360 87.4%	35 8.5%	12 2.9%	3 0.7%	1 0.2%	1 0.2%	2 0.5%	10-19 μg
99/00	163 31.2%	153 29.3%	47 9.0%	42 8.0%	32 6.1%	19 3.6%	456 87.2%	32 6.1%	20 3.8%	12 2.3%	1 0.2%	2 0.4%	3 0.6%	10-19 μg
00/01	168 27.7%	132 21.8%	103 17.0%	43 7.1%	46 7.6%	36 5.9%	528 87.1%	32 5.3%	15 2.5%	14 2.3%	10 1.7%	7 1.2%	17 2.8%	20-24 μg
01/02	176 42.3%	117 28.1%	36 8.7%	23 5.5%	19 4.6%	17 4.1%	388 93.3%	14 3.4%	10 2.4%	3 0.7%	1 0.2%	0 0.0%	1 0.2%	10-19 μg
02/03	147 41.4%	89 25.1%	28 7.9%	21 5.9%	19 5.4%	15 4.2%	319 89.9%	22 6.2%	13 3.7%	0 0.0%	1 0.3%	0 0.0%	1 0.3%	10-19 μg
03/04	155 39.8%	106 27.2%	38 9.8%	26 6.7%	13 3.3%	14 3.6%	352 90.5%	26 6.7%	7 1.8%	3 0.8%	1 0.3%	0 0.0%	1 0.3%	10-19 μg
04/05	193 47.0%	97 23.6%	24 5.8%	23 5.6%	15 3.6%	23 5.6%	375 91.2%	8 1.9%	11 2.7%	11 2.7%	5 1.2%	1 0.2%	6 1.5%	10-19 μg
05/06	182 49.9%	98 26.8%	31 8.5%	17 4.7%	12 3.3%	10 2.7%	350 95.9%	6 1.6%	4 1.1%	2 0.5%	0 0.0%	3 0.8%	3 0.8%	10-19 μg
06/07	183 56.8%	65 20.2%	23 7.1%	14 4.3%	12 3.7%	5 1.6%	302 93.8%	13 4.0%	2 0.6%	0 0.0%	0 0.0%	5 1.6%	5 1.6%	<10 μg
07/08	136 56.7%	44 18.3%	17 7.1%	6 2.5%	12 5.0%	5 2.1%	220 91.7%	10 4.2%	7 2.9%	3 1.3%	0 0.0%	0 0.0%	0 0.0%	<10 μg
08/09	70 61.4%	18 15.8%	12 10.5%	5 4.4%	5 4.4%	1 0.9%	111 97.4%	1 0.9%	1 0.9%	1 0.9%	0 0.0%	0 0.0%	0 0.0%	<10 μg
09/10	128 39.0%	109 33.2%	46 14.0%	14 4.3%	13 4.0%	9 2.7%	319 97.3%	7 2.1%	1 0.3%	0 0.0%	1 0.3%	0 0.0%	1 0.3%	10-19 μg

Table 22 The breakdown of female lead workers under medical surveillance in the demolition sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year

Year	<10 μg	10-19 μg	20-24 μg	<25 μg	25-29 μg	30-34 μg	35-39 μg	30-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	>40 μg	Median range
92/93									1 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
93/94	No females under medical surveillance															
94/95	No females under medical surveillance															
95/96									1 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
96/97	No females under medical surveillance															
97/98	3 60.0%	2 40.0%	5 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	5 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<20 μg
98/99*	4 100.0%		4 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	4 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
99/00	4 100.0%		4 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	4 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
00/01	No females under medical surveillance															
01/02	No females under medical surveillance															
02/03	No females under medical surveillance															
03/04	No females under medical surveillance															
04/05	No females under medical surveillance															
05/06	1 100.0%		1 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
06/07	1 100.0%		1 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
07/08	No females under medical surveillance															
08/09	No females under medical surveillance															
09/10	No females under medical surveillance															

Workers under medical surveillance in the painting of building and vehicles sector

Table 23 The breakdown of male lead workers under medical surveillance in the painting of building and vehicles sector, by highest recorded blood-lead level and [$\mu\text{g}/100\text{ml}$] year (Figures are for the total number of male workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	25-29 μg	30-34 μg	35-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	70+ μg	Median range
92/93							815 91.3%	36 4.0%	12 1.3%	17 1.9%	8 0.9%	5 0.6%	13 1.5%	<40 μg
93/94							483 96.8%	14 2.8%	1 0.2%	1 0.2%	0 0.0%	0 0.0%	0 0.0%	<40 μg
94/95							421 93.6%	11 2.4%	8 1.8%	4 0.9%	4 0.9%	2 0.4%	6 1.3%	<40 μg
95/96							296 91.4%	14 4.3%	12 3.7%	2 0.6%	0 0.0%	0 0.0%	0 0.0%	<40 μg
96/97	299 71.7%	27 6.5%	28 6.7%	16 3.8%	8 1.9%	378 90.6%	23 5.5%	10 2.4%	6 1.4%	0 0.0%	0 0.0%	0 0.0%	<20 μg	
97/98	385 65.9%	37 6.3%	38 6.5%	33 5.7%	26 4.5%	519 88.9%	33 5.7%	17 2.9%	5 0.9%	4 0.7%	6 1.0%	10 1.7%	<20 μg	
98/99*	283 44.1%	150 23.4%	44 6.9%	41 6.4%	27 4.2%	28 4.4%	573 89.3%	29 4.5%	23 3.6%	10 1.6%	4 0.6%	3 0.5%	7 1.1%	10-19 μg
99/00	289 34.5%	167 20.0%	98 11.7%	68 8.1%	57 6.8%	41 4.9%	720 86.0%	58 6.9%	41 4.9%	12 1.4%	3 0.4%	3 0.4%	6 0.7%	10-19 μg
00/01	299 44.6%	129 19.2%	45 6.7%	47 7.0%	32 4.8%	32 4.8%	584 87.0%	50 7.5%	27 4.0%	7 1.0%	2 0.3%	1 0.1%	3 0.4%	10-19 μg
01/02	361 44.5%	150 18.5%	63 7.8%	35 4.3%	35 4.3%	45 5.5%	689 85.0%	50 6.2%	40 4.9%	17 2.1%	6 0.7%	9 1.1%	15 1.8%	10-19 μg
02/03	242 43.6%	116 20.9%	55 (1) 9.9%	35 6.3%	24 4.3%	22 4.0%	494 (1) 89.0%	32 5.8%	16 2.9%	8 1.4%	3 0.5%	2 0.4%	5 0.9%	10-19 μg
03/04	260 48.1%	118 21.8%	31 5.7%	35 6.5%	20 3.7%	29 5.4%	493 91.1%	27 5.0%	8 1.5%	7 1.3%	2 0.4%	4 0.7%	6 1.1%	10-19 μg
04/05	212 53.7%	85 21.5%	20 5.1%	14 3.5%	12 3.0%	14 3.5%	357 90.4%	22 5.6%	10 2.5%	3 0.8%	2 0.5%	1 0.3%	3 0.8%	<10 μg
05/06	267 48.6%	140 25.5%	33 6.0%	32 5.8%	21 3.8%	19 3.5%	512 93.3%	25 4.6%	7 1.3%	2 0.4%	2 0.4%	1 0.2%	3 0.5%	10-19 μg
06/07	311 49.4%	130 20.7%	36 5.7%	44 7.0%	33 5.2%	28 4.5%	582 92.5%	28 4.5%	10 1.6%	3 0.5%	2 0.3%	4 0.6%	6 1.0%	10-19 μg
07/08	274 (2) 43.6%	136 (1) 21.7%	56 8.9%	51 8.1%	29 4.6%	26 4.1%	572 (3) 91.1%	31 4.9%	17 2.7%	6 1.0%	0 0.0%	2 0.3%	2 0.3%	10-19 μg
08/09	154 (1) 36.2%	73 17.1%	27 6.3%	32 7.5%	31 7.3%	23 5.4%	340 (1) 79.8%	42 9.9%	37 8.7%	7 1.6%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
09/10	188 54.5%	61 17.7%	19 (1) 5.5%	22 6.4%	22 6.4%	9 2.6%	321 (1) 93.0%	16 4.6%	5 1.4%	3 0.9%	0 0.0%	0 0.0%	0 0.0%	<10 μg

Table 24 The breakdown of female lead workers under medical surveillance in the painting of building and vehicles sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year

Year	<10 μg	10-19 μg	20-24 μg	<25 μg	25-29 μg	30-34 μg	35-39 μg	30-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	>40 μg	Median range	
92/93									2	0	0	0	0	0	0	0	<40 μg
									100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
93/94									1	0	0	0	0	0	0	0	<40 μg
									100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
94/95	No females under medical surveillance																
95/96									2	0	0	0	0	0	0	0	<40 μg
									100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
96/97	1			1	0	0	0	0	1	0	0	0	0	0	0	<25 μg	
	100.0%			100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
97/98	No females under medical surveillance																
98/99*	No females under medical surveillance																
99/00	No females under medical surveillance																
00/01	3	0	2	5	0	0	0	0	5	0	0	0	0	0	0	<10 μg	
	60.0%	0.0%	40.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
01/02	3			3	0	0	0	0	3	0	0	0	0	0	0	<25 μg	
	100.0%			100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
02/03	7			7	0	0	0	0	7	0	0	0	0	0	0	<25 μg	
	100.0%			100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
03/04	1			1	0	0	0	0	1	0	0	0	0	0	0	<25 μg	
	100.0%			100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
04/05	1			1	0	0	0	0	1	0	0	0	0	0	0	<25 μg	
	100.0%			100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
05/06	No females under medical surveillance																
06/07	No females under medical surveillance																
07/08	6			6	0	0	0	0	6	0	0	0	0	0	0	<25 μg	
	100.0%			100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
08/09	2			2	0	0	0	0	2	0	0	0	0	0	0	<25 μg	
	100.0%			100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
09/10	4	1	0	5	0	0	0	0	5	0	0	0	0	0	0	<10 μg	
	80.0%	20.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Workers under medical surveillance in the work with metallic lead and lead containing alloys sector

Table 25 The breakdown of male lead workers under medical surveillance in the work with metallic lead and lead containing alloys sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year (Figures are for the total number of male workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	25-29 μg	30-34 μg	35-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	70+ μg	Median range
92/93							1485 84.0%	160 9.1%	81 4.6%	35 2.0%	4 0.2%	2 0.1%	6 0.3%	<40 μg
93/94							1455 86.1%	144 8.5%	50 3.0%	25 1.5%	12 0.7%	4 0.2%	16 0.9%	<40 μg
94/95							1542 86.9%	147 8.3%	45 2.5%	26 1.5%	8 0.5%	7 0.4%	15 0.8%	<40 μg
95/96							1332 86.0%	121 7.8%	64 4.1%	22 1.4%	7 0.5%	2 0.1%	9 0.6%	<40 μg
96/97	876 51.7%	187 11.0%	179 10.6%	162 9.6%	95 5.6%	1499 88.4%	132 7.8%	44 2.6%	17 1.0%	3 0.2%	1 0.1%	4 0.2%	<20 μg	
97/98	1036 58.2%	206 11.6%	154 8.7%	127 7.1%	115 6.5%	1638 92.0%	94 5.3%	37 2.1%	8 0.4%	3 0.2%	0 0.0%	3 0.2%	<20 μg	
98/99*	482 (1) 27.9%	578 (1) 33.5%	177 (1) 10.3%	144 (2) 8.3%	112 6.5%	102 5.9%	1595 (5) 92.4%	84 4.9%	35 2.0%	9 0.5%	2 0.1%	1 0.1%	3 0.2%	10-19 μg
99/00	608 (2) 32.9%	517 (4) 28.0%	172 (1) 9.3%	153 8.3%	132 7.1%	80 4.3%	1662 (7) 89.9%	115 6.2%	57 3.1%	12 0.6%	1 0.1%	1 0.1%	2 0.1%	10-19 μg
00/01	548 (1) 34.3%	486 (2) 30.4%	151 9.4%	122 7.6%	101 6.3%	70 4.4%	1478 (3) 92.4%	80 5.0%	34 2.1%	6 0.4%	1 0.1%	0 0.0%	1 0.1%	10-19 μg
01/02	533 (2) 33.6%	443 (3) 27.9%	167 (1) 10.5%	150 9.5%	95 6.0%	75 4.7%	1463 (6) 92.3%	73 4.6%	36 2.3%	12 0.8%	1 0.1%	0 0.0%	1 0.1%	10-19 μg
02/03	431 (2) 34.0%	360 (4) 28.4%	138 (1) 10.9%	92 (1) 7.3%	76 (2) 6.0%	68 (1) 5.4%	1165 (11) 91.9%	64 (1) 5.1%	27 2.1%	11 0.9%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
03/04	342 (2) 32.2%	248 (2) 23.3%	124 11.7%	99 9.3%	86 (3) 8.1%	59 5.6%	958 (7) 90.1%	77 7.2%	18 1.7%	7 0.7%	3 0.3%	0 0.0%	3 0.3%	10-19 μg
04/05	353 34.4%	227 (2) 22.1%	121 (1) 11.8%	74 7.2%	73 (1) 7.1%	73 (1) 7.1%	921 (5) 89.8%	69 6.7%	27 2.6%	7 0.7%	2 0.2%	0 0.0%	2 0.2%	10-19 μg
05/06	212 (1) 28.2%	207 (4) 27.5%	88 11.7%	67 (2) 8.9%	61 8.1%	43 (1) 5.7%	678 (8) 90.0%	48 6.4%	20 2.7%	5 0.7%	2 0.3%	0 0.0%	2 0.3%	10-19 μg
06/07	250 30.9%	208 25.7%	84 10.4%	84 10.4%	57 7.1%	39 4.8%	722 89.4%	57 7.1%	21 2.6%	4 0.5%	4 0.5%	0 0.0%	4 0.5%	10-19 μg
07/08	203 35.2%	148 25.7%	69 12.0%	58 10.1%	37 6.4%	19 3.3%	534 92.7%	24 4.2%	16 2.8%	2 0.3%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
08/09	327 44.3%	163 (1) 22.1%	85 (1) 11.5%	51 6.9%	53 7.2%	17 2.3%	696 (2) 94.3%	27 3.7%	10 1.4%	4 0.5%	0 0.0%	1 0.1%	1 0.1%	10-19 μg
09/10	134 (1) 30.2%	114 (1) 25.7%	61 13.7%	46 10.4%	31 7.0%	26 5.9%	412 (2) 92.8%	24 5.4%	7 1.6%	1 0.2%	0 0.0%	0 0.0%	0 0.0%	10-19 μg

Table 26 The breakdown of female lead workers under medical surveillance in the work with metallic lead and lead containing alloys sector, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year (Figures are for the total number of female workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	<25 μg	25-29 μg	30-34 μg	35-39 μg	30-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	>40 μg	Median range
92/93									120 99.2%	1 0.8%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 0.8%	<40 μg
93/94									122 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
94/95									147 99.3%	1 0.7%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 0.7%	<40 μg
95/96									121 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
96/97	111 76.6%		16 11.0%	127 87.6%	10 6.9%	3 2.1%	3 2.1%	6 4.1%	143 98.6%	1 0.7%	0 0.0%	1 0.7%	0 0.0%	0 0.0%	2 1.4%	<20 μg
97/98	104 75.4%		20 14.5%	124 89.9%	6 4.3%	4 2.9%	3 2.2%	7 5.1%	137 99.3%	1 0.7%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 0.7%	<20 μg
98/99*	58 55.2%	27 25.7%	10 9.5%	95 90.5%	7 6.7%	0 0.0%	1 1.0%	1 1.0%	103 98.1%	2 1.9%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	2 1.9%	<10 μg
99/00	81 64.3%	35 27.8%	4 3.2%	120 95.2%	3 2.4%	1 0.8%	1 0.8%	2 1.6%	125 99.2%	1 0.8%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 0.8%	<10 μg
00/01	79 64.8%	32 26.2%	1 0.8%	112 91.8%	4 3.3%	2 1.6%	2 1.6%	4 3.3%	120 98.4%	1 0.8%	1 0.8%	0 0.0%	0 0.0%	0 0.0%	2 1.6%	<10 μg
01/02	73 (3) 67.6%	27 25.0%	2 1.9%	102 (3) 94.4%	4 3.7%	1 0.9%	0 0.0%	1 0.9%	107 (3) 99.1%	0 0.0%	1 0.9%	0 0.0%	0 0.0%	0 0.0%	1 0.9%	<10 μg
02/03	46 60.5%	20 26.3%	4 5.3%	70 92.1%	3 3.9%	1 1.3%	0 0.0%	1 1.3%	74 97.4%	1 1.3%	1 1.3%	0 0.0%	0 0.0%	0 0.0%	2 2.6%	<10 μg
03/04	69 (2) 80.2%	12 14.0%	4 4.7%	85 (2) 98.8%	1 1.2%	0 0.0%	0 0.0%	0 0.0%	86 (2) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
04/05	33 73.3%	8 17.8%	3 6.7%	44 97.8%	0 0.0%	0 0.0%	1 2.2%	1 2.2%	45 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
05/06	42 (5) 64.6%	19 (5) 29.2%	2 3.1%	63 (10) 96.9%	2 3.1%	0 0.0%	0 0.0%	0 0.0%	65 (10) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
06/07	50 69.4%	20 27.8%	1 1.4%	71 98.6%	1 1.4%	0 0.0%	0 0.0%	0 0.0%	72 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
07/08	58 80.6%	13 18.1%	1 1.4%	72 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	72 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
08/09	33 (1) 70.2%	13 27.7%	1 2.1%	47 (1) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	47 (1) 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
09/10	17 77.3%	5 22.7%	0 0.0%	22 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	22 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg

Workers under medical surveillance in other processes

Table 27 The breakdown of male lead workers under medical surveillance in other processes, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year (Figures are for the total number of male workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	25-29 μg	30-34 μg	35-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	70+ μg	Median range
92/93							2694 91.3%	155 5.3%	56 1.9%	30 1.0%	9 0.3%	7 0.2%	16 0.5%	<40 μg
93/94							2498 92.4%	91 3.4%	69 2.6%	30 1.1%	9 0.3%	6 0.2%	15 0.6%	<40 μg
94/95							2598 90.2%	149 5.2%	68 2.4%	47 1.6%	15 0.5%	3 0.1%	18 0.6%	<40 μg
95/96							2980 92.6%	150 4.7%	56 1.7%	23 0.7%	7 0.2%	1 0.0%	8 0.2%	<40 μg
96/97	1599 67.4%		221 9.3%	179 7.5%	120 5.1%	87 3.7%	2206 93.0%	106 4.5%	45 1.9%	16 0.7%	0 0.0%	0 0.0%	0 0.0%	<20 μg
97/98	1818 70.5%		192 7.4%	150 5.8%	125 4.8%	88 3.4%	2373 92.0%	118 4.6%	56 2.2%	21 0.8%	4 0.2%	7 0.3%	11 0.4%	<20 μg
98/99*	1051 (4) 40.2%	738 28.2%	216 8.3%	173 6.6%	136 5.2%	95 3.6%	2409 (4) 92.1%	106 4.1%	62 2.4%	27 1.0%	7 0.3%	6 0.2%	13 0.5%	10-19 μg
99/00	1075 (4) 39.8%	705 (3) 26.1%	227 8.4%	217 8.0%	150 5.6%	120 4.4%	2494 (7) 92.3%	121 4.5%	51 1.9%	24 0.9%	9 0.3%	2 0.1%	11 0.4%	10-19 μg
00/01	1001 (6) 42.7%	566 (3) 24.1%	216 9.2%	156 6.7%	107 4.6%	96 4.1%	2142 (9) 91.4%	133 5.7%	46 2.0%	19 0.8%	2 0.1%	2 0.1%	4 0.2%	10-19 μg
01/02	1119 (2) 45.5%	566 (2) 23.0%	194 7.9%	169 6.9%	121 4.9%	99 4.0%	2268 (4) 92.2%	127 5.2%	51 2.1%	8 0.3%	5 0.2%	1 0.0%	6 0.2%	10-19 μg
02/03	1103 (3) 46.0%	580 24.2%	225 9.4%	140 5.8%	105 4.4%	101 4.2%	2254 (3) 94.0%	88 3.7%	46 1.9%	5 0.2%	2 0.1%	3 0.1%	5 0.2%	10-19 μg
03/04	1027 (9) 44.6%	557 (2) 24.2%	179 (1) 7.8%	169 7.3%	121 5.2%	77 3.3%	2130 (12) 92.4%	111 4.8%	43 1.9%	16 0.7%	4 0.2%	1 0.0%	5 0.2%	10-19 μg
04/05	766 (3) 43.0%	468 (3) 26.3%	168 9.4%	107 6.0%	103 5.8%	65 3.7%	1677 (6) 94.2%	67 3.8%	27 1.5%	6 0.3%	2 0.1%	1 0.1%	3 0.2%	10-19 μg
05/06	856 (2) 43.0%	569 (1) 28.6%	171 8.6%	120 6.0%	97 4.9%	74 3.7%	1887 (3) 94.9%	71 3.6%	23 1.2%	6 0.3%	0 0.0%	2 0.1%	2 0.1%	10-19 μg
06/07	815 44.3%	465 25.3%	184 10.0%	134 7.3%	86 4.7%	54 2.9%	1738 94.5%	72 3.9%	15 0.8%	8 0.4%	5 0.3%	1 0.1%	6 0.3%	10-19 μg
07/08	797 45.0%	420 (1) 23.7%	166 9.4%	122 6.9%	88 (1) 5.0%	82 4.6%	1675 (2) 94.5%	68 3.8%	22 1.2%	4 0.2%	3 0.2%	0 0.0%	3 0.2%	10-19 μg
08/09	772 54.9%	299 21.3%	95 (2) 6.8%	91 (1) 6.5%	59 (1) 4.2%	44 3.1%	1360 (4) 96.8%	30 2.1%	11 0.8%	4 0.3%	0 0.0%	0 0.0%	0 0.0%	<10 μg
09/10	985 (1) 48.9%	432 (1) 21.4%	162 8.0%	127 6.3%	107 5.3%	77 3.8%	1890 (2) 93.8%	94 4.7%	27 1.3%	3 0.1%	1 0.0%	0 0.0%	1 0.0%	10-19 μg

Table 28 The breakdown of female lead workers under medical surveillance in other processes, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year (Figures are for the total number of female workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	<25 μg	25-29 μg	30-34 μg	35-39 μg	30-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	>40 μg	Median range
92/93									103 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
93/94									97 99.0%	1 1.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 1.0%	<40 μg
94/95									63 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
95/96									90 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
96/97	44 91.7%		1 2.1%	45 93.8%	0 0.0%	0 0.0%	1 2.1%	1 2.1%	46 95.8%	1 2.1%	0 0.0%	1 2.1%	0 0.0%	0 0.0%	2 4.2%	<20 μg
97/98	71 94.7%		3 4.0%	74 98.7%	1 1.3%	0 0.0%	0 0.0%	0 0.0%	75 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<20 μg
98/99*	70 57.4%	40 (2) 32.8%	3 2.5%	113 (2) 92.6%	3 (1) 2.5%	1 0.8%	0 0.0%	1 0.8%	117 (3) 95.9%	2 1.6%	0 0.0%	3 2.5%	0 0.0%	0 0.0%	5 4.1%	<10 μg
99/00	51 52.6%	31 32.0%	7 7.2%	89 91.8%	5 5.2%	0 0.0%	1 (1) 1.0%	1 (1) 1.0%	95 (1) 97.9%	0 0.0%	2 2.1%	0 0.0%	0 0.0%	0 0.0%	2 2.1%	<10 μg
00/01	39 50.6%	26 33.8%	5 6.5%	70 90.9%	3 3.9%	1 1.3%	2 2.6%	3 3.9%	76 98.7%	1 1.3%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 1.3%	<10 μg
01/02	34 50.0%	26 38.2%	3 4.4%	63 92.6%	4 5.9%	0 0.0%	0 0.0%	0 0.0%	67 98.5%	0 0.0%	1 1.5%	0 0.0%	0 0.0%	0 0.0%	1 1.5%	<10 μg
02/03	48 64.0%	26 34.7%	0 0.0%	74 98.7%	0 0.0%	0 0.0%	1 1.3%	1 1.3%	75 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
03/04	50 (1) 63.3%	23 29.1%	3 3.8%	76 (1) 96.2%	1 1.3%	0 0.0%	1 1.3%	1 1.3%	78 (1) 98.7%	0 0.0%	1 1.3%	0 0.0%	0 0.0%	0 0.0%	1 1.3%	<10 μg
04/05	54 67.5%	21 26.3%	4 5.0%	79 98.8%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	79 98.8%	0 0.0%	0 0.0%	1 1.3%	0 0.0%	0 0.0%	1 1.3%	<10 μg
05/06	43 71.7%	16 26.7%	0 0.0%	59 98.3%	1 1.7%	0 0.0%	0 0.0%	0 0.0%	60 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
06/07	29 61.7%	15 (2) 31.9%	2 4.3%	46 (2) 97.9%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	46 (2) 97.9%	1 2.1%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 2.1%	<10 μg
07/08	40 71.4%	14 25.0%	1 1.8%	55 98.2%	1 1.8%	0 0.0%	0 0.0%	0 0.0%	56 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
08/09	37 84.1%	3 6.8%	1 2.3%	41 93.2%	1 2.3%	2 4.5%	0 0.0%	2 4.5%	44 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
09/10	44 67.7%	15 23.1%	5 7.7%	64 98.5%	1 1.5%	0 0.0%	0 0.0%	0 0.0%	65 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg

Workers under medical surveillance in the scrap industry

Table 29 The breakdown of male lead workers under medical surveillance in the scrap industry, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year (Figures are for the total number of male workers, of which the number under 18 years of age is given in brackets)

Year	<10 μg	10-19 μg	20-24 μg	25-29 μg	30-34 μg	35-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	70+ μg	Median range
92/93							100 69.0%	17 11.7%	5 3.4%	13 9.0%	6 4.1%	4 2.8%	10 6.9%	<40 μg
93/94							167 77.7%	25 11.6%	12 5.6%	5 2.3%	3 1.4%	3 1.4%	6 2.8%	<40 μg
94/95							198 72.8%	44 16.2%	18 6.6%	9 3.3%	1 0.4%	2 0.7%	3 1.1%	<40 μg
95/96							200 73.0%	41 15.0%	22 8.0%	8 2.9%	2 0.7%	1 0.4%	3 1.1%	<40 μg
96/97	64 30.0%		27 12.7%	20 9.4%	29 13.6%	16 7.5%	156 73.2%	40 18.8%	12 5.6%	3 1.4%	2 0.9%	0 0.0%	2 0.9%	25-29 μg
97/98	85 26.6%		42 13.2%	33 10.3%	40 12.5%	33 10.3%	233 73.0%	42 13.2%	24 7.5%	13 4.1%	4 1.3%	3 0.9%	7 2.2%	25-29 μg
98/99*	31 8.3%	62 16.6%	45 12.0%	56 15.0%	41 11.0%	38 10.2%	273 73.0%	51 13.6%	36 9.6%	10 2.7%	2 0.5%	2 0.5%	4 1.1%	25-29 μg
99/00	73 19.2%	82 21.6%	46 12.1%	52 13.7%	31 8.2%	34 8.9%	318 83.7%	34 8.9%	23 6.1%	4 1.1%	1 0.3%	0 0.0%	1 0.3%	20-24 μg
00/01	63 15.5%	101 24.8%	56 13.8%	61 15.0%	35 8.6%	34 8.4%	350 86.0%	34 8.4%	20 4.9%	3 0.7%	0 0.0%	0 0.0%	0 0.0%	20-24 μg
01/02	42 (2) 12.8%	80 24.5%	50 15.3%	38 11.6%	37 11.3%	30 9.2%	277 (2) 84.7%	33 10.1%	14 4.3%	1 0.3%	1 0.3%	1 0.3%	2 0.6%	20-24 μg
02/03	61 19.3%	74 23.4%	34 10.8%	41 13.0%	33 10.4%	20 6.3%	263 83.2%	35 11.1%	15 4.7%	2 0.6%	0 0.0%	1 0.3%	1 0.3%	20-24 μg
03/04	42 (1) 17.7%	66 27.8%	30 12.7%	23 9.7%	19 8.0%	18 7.6%	198 (1) 83.5%	30 12.7%	6 (1) 2.5%	3 1.3%	0 0.0%	0 0.0%	0 0.0%	20-24 μg
04/05	77 29.7%	66 25.5%	27 10.4%	13 5.0%	25 9.7%	15 5.8%	223 86.1%	19 7.3%	12 4.6%	4 1.5%	1 0.4%	0 0.0%	1 0.4%	10-19 μg
05/06	95 28.3%	114 33.9%	34 10.1%	27 8.0%	21 6.3%	12 3.6%	303 90.2%	17 5.1%	12 3.6%	4 1.2%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
06/07	119 36.6%	109 33.5%	36 11.1%	29 8.9%	8 2.5%	8 2.5%	309 95.1%	11 3.4%	4 1.2%	1 0.3%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
07/08	280 56.9%	124 25.2%	31 6.3%	14 2.8%	15 3.0%	11 2.2%	475 96.5%	9 1.8%	5 1.0%	1 0.2%	1 0.2%	1 0.2%	2 0.4%	<10 μg
08/09	95 31.6%	106 35.2%	26 8.6%	21 7.0%	10 3.3%	12 4.0%	270 89.7%	13 4.3%	12 4.0%	3 1.0%	3 1.0%	0 0.0%	3 1.0%	10-19 μg
09/10	259 50.3%	79 15.3%	24 4.7%	21 4.1%	14 2.7%	17 3.3%	414 80.4%	31 (1) 6.0%	34 6.6%	25 4.9%	4 0.8%	7 1.4%	11 2.1%	<10 μg

Table 30 The breakdown of female lead workers under medical surveillance in the scrap industry, by highest recorded blood-lead level [$\mu\text{g}/100\text{ml}$] and year

Year	<10 μg	10-19 μg	20-24 μg	<25 μg	25-29 μg	30-34 μg	35-39 μg	30-39 μg	<40 μg	40-49 μg	50-59 μg	60-69 μg	70-79 μg	80+ μg	>40 μg	Median range
92/93									1 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
93/94									6 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
94/95									6 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
95/96									7 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<40 μg
96/97	No females under medical surveillance															
97/98	10 90.9%		1 9.1%	11 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	11 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<20 μg
98/99*	1 14.3%	5 71.4%	0 0.0%	6 85.7%	1 14.3%	0 0.0%	0 0.0%	0 0.0%	7 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
99/00	2 20.0%	6 60.0%	1 10.0%	9 90.0%	1 10.0%	0 0.0%	0 0.0%	0 0.0%	10 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
00/01	4 66.7%	2 33.3%	0 0.0%	6 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	6 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
01/02	3 60.0%	2 40.0%	0 0.0%	5 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	5 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
02/03	4 66.7%	2 33.3%	0 0.0%	6 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	6 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg
03/04	No females under medical surveillance															
04/05	7 100.0%			7 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	7 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
05/06	2 40.0%	2 40.0%	1 20.0%	5 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	5 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10-19 μg
06/07	No females under medical surveillance															
07/08	18 100.0%			18 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	18 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
08/09	1 100.0%			1 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<25 μg
09/10	21 95.5%	1 4.5%	0 0.0%	22 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	22 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	<10 μg

Prepared by the Health & Safety Laboratory for the Health and Safety Executive

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