

# Women's Personal Protective Equipment: One Size Does Not Fit All

According to the Health and Safety Executive (HSE) in 2014/15:

- 142 people were killed at work
- 611,000 injuries occurred at work
- 27.3 million working days were lost due to work-related illness and workplace injury.

So there is still much that can be done to make workplaces safer. Appropriate instructions, procedures, training and supervision all have a major role in encouraging people to work safely and responsibly. Yet, even where engineering controls and safe systems of work have been applied, some hazards can remain. PPE is needed in these cases to reduce the risk.

In May 2016 Prospect, the Women's Engineering Society (WES), Women into Science and Engineering (WISE), the TUC and Institution of Mechanical Engineers Support Network undertook a survey to review the women's experience of wearing PPE. Our survey builds on a 2009 WES survey which found that ill-fitting PPE for women was a common experience but often accepted as 'part of the way things are'. Our survey shows that whilst users appear to think that some items of PPE have improved in the last seven years, progress is far too slow. Furthermore, our respondents were less inclined to accept uncomfortable and unfit PPE as their lot. Many took the time to comment that the survey was much needed and that the findings must be acted on. The survey was conducted online during May 2016 and promoted by all partner organisations.

3086 women responded to the survey, spanning an age range from 20-59 and a wide range of sectors. 100 or more responses were received from women working in emergency services, transport manufacturing, construction, R&D and nuclear with a further 730 responses from a range of other sectors. 54% of respondents were trade union members and 53% belonged to a professional body. 89% of respondents are currently required to wear PPE at work; others have done so in the past or wear it on an occasional basis, such as for site visits.

## Provision of PPE

84% of respondents stated that their employer provides PPE for individuals and 9% that it is provided on a pooled basis. In a smaller number of cases (1%) a combination of pooled and individual items is provided. 6% of respondents provided some of their own PPE.

99% of respondents noted that their employer pays for the PPE, however responsibility for looking after the PPE varies by sector. As shown in Table 1 employers are most likely to take responsibility for cleaning the PPE of nuclear and R&D workers and least likely to do so for workers in emergency services. Women working in transport and construction are most likely to have the responsibility of storing, maintaining and repairing their own PPE. Union members are more likely than others to get their PPE cleaned by their employer but less likely to benefit from employer maintenance and repair. In fact it is a legal requirement to provide PPE free of charge including the costs of maintaining and replacing it.

	Who cleans it?			Who stores it?			Who maintains/repairs it?			Who replaces it?		
	Employer	Self	Other	Employer	Self	Other	Employer	Self	Other	Employer	Self	Other
Construction	11%	89%	0%	15%	84%	1%	52%	47%	2%	86%	13%	1%
Defence	22%	78%	0%	28%	69%	3%	64%	31%	5%	90%	10%	0%
Emergency Services	2%	98%	1%	31%	68%	1%	73%	25%	2%	91%	9%	1%
Energy	26%	71%	3%	27%	72%	1%	59%	41%	0%	89%	11%	0%
Manufacturing	29%	69%	3%	29%	70%	1%	47%	47%	6%	85%	15%	1%
Nuclear	55%	43%	2%	57%	42%	1%	79%	16%	5%	87%	16%	5%
Research & Development	45%	51%	5%	50%	49%	1%	58%	36%	6%	84%	16%	0%
Transport	14%	84%	2%	15%	84%	1%	42%	54%	5%	91%	9%	1%
Union Member	20%	78%	2%	29%	71%	1%	52%	43%	5%	88%	11%	1%
Professional Body Member	13%	85%	2%	31%	68%	1%	64%	32%	4%	89%	10%	1%
Overall	14%	85%	2%	29%	70%	1%	60%	36%	4%	89%	10%	1%

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Table 1 - Who is responsible for PPE?

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Just 29% of respondents reported that the PPE they wear is designed for women (see chart 1) though this represents a small improvement on WES' survey, which found that 74% of PPE was designed for men. However, as shown below, less than 10% of women working in the energy sector and just 17% in construction currently wear PPE designed for women. Union members (25%) are slightly less likely than non-members (32%) to benefit from PPE designed for women.

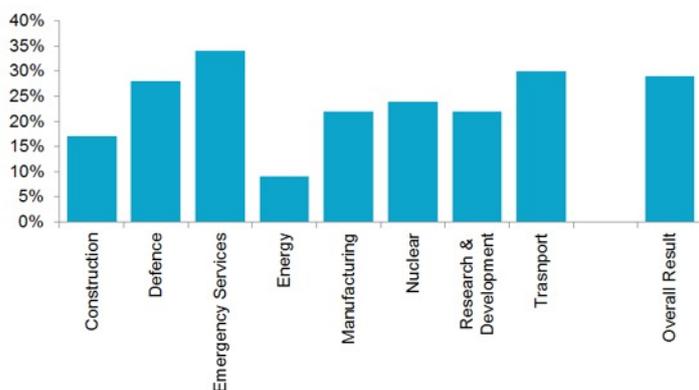


Chart 1 - Is your PPE designed for women?

13% of respondents reported that their employer does provide an alterations service for standard PPE.

### Is it a good fit?

Respondents were asked to rate the overall comfort of their PPE. This was analysed on a rating scale from 1 (very uncomfortable) to 10 (very comfortable). The score for each sector has been calculated by multiplying the number of instances of a comfort rating occurring by the comfort rating. Table 2 shows that women working in R&D have the most comfortable PPE whilst those in the emergency services have the least comfortable. Overall trade union members have more comfortable PPE than their non-unionised counterparts.

	Comfort										Score
	1	2	3	4	5	6	7	8	9	10	
Construction	6%	9%	10%	12%	16%	14%	13%	9%	6%	4%	523
Defence	1%	9%	14%	14%	20%	9%	19%	11%	3%	1%	529
Emergency Services	15%	12%	19%	17%	18%	10%	6%	3%	0%	1%	390
Energy	6%	9%	13%	19%	14%	16%	11%	10%	2%	0%	480
Manufacturing	6%	6%	11%	16%	22%	16%	11%	7%	3%	2%	501
Nuclear	3%	2%	11%	16%	21%	21%	17%	6%	0%	4%	542
Research & Development	0%	3%	6%	12%	21%	16%	25%	15%	6%	6%	637
Transport	8%	5%	12%	14%	12%	14%	12%	7%	2%	4%	497
Overall	9%	8%	15%	15%	21%	13%	11%	7%	2%	3%	479

Table 2 - How comfortable is your PPE?

When asked to describe the fit of specific items of PPE, respondents identified trousers, overalls, jackets and gloves as least likely to provide a suitable fit – see Table 3

	How well does your PPE fit?		
	Good	Ok	Not Suitable
Jackets	16%	60%	24%
Gloves	28%	51%	21%
Footwear	34%	49%	17%
Trousers	10%	49%	41%
Headwear	22%	58%	20%
Lab Coats	20%	63%	17%
Overalls	10%	56%	35%
Eye Wear	20%	71%	18%

Table 3 - How well does your PPE fit?

Three of these items (jackets, gloves and trousers) were also most frequently cited as the worst PPE clothing by respondents to WES' 2009 survey; a fair indication that insufficient progress has been made in the last seven years. The one item where there does appear to have been greater progress is in the provision of footwear though, judging from the large number of comments received, even this appears to be patchy. There was a high volume of responses from women working in the emergency services highlighting the unsuitability of body armour, stab vests and hi-vis vests and jackets. This group was not covered by the 2009 survey, but appears to be a major problem area.

### Impact

57% of respondents reported that their PPE sometimes or significantly hampers their work; a similar level of concern to that expressed in the 2009 WES survey. A further 27% said that they were occasionally hampered by their PPE and just 17% that this was not at all the case. The two worst affected sectors are emergency services and energy, with women in nuclear and R&D faring best in this regard. Union members are less likely than non-members to report that their PPE

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hampers their work. A breakdown of results can be found in Table 4

	To what extent does your PPE hamper you at work?			
	Significantly	Sometimes	Occasionally	Not at All
Construction	10%	37%	36%	16%
Defence	7%	38%	27%	27%
Emergency Services	16%	57%	22%	5%
Energy	10%	44%	29%	18%
Manufacturing	9%	40%	29%	23%
Nuclear	2%	37%	34%	27%
Research & Development	1%	28%	42%	38%
Transport	8%	36%	29%	27%
Union Member	8%	39%	30%	24%
Non-Union Member	13%	54%	24%	9%
Professional Body Member	11%	49%	26%	15%
Non Professional Body Member	10%	43%	28%	19%
Overall	11%	46%	27%	17%

Table 4 - Does PPE hamper your work?

11% of respondents had worn standard PPE during pregnancy and 1% had worn maternity PPE. Of these, half of respondents had been able to continue their role until their planned maternity leave but half had either curtailed the normal range of their duties or had to change their role in the run up to maternity leave. A very small minority had consequently started their maternity leave earlier than they had wanted to.

A larger proportion of respondents (21%) had worn PPE during menopause and, of these, 58% had continued comfortably in their usual role. However 38% had needed to curtail the normal range of their duties and 4% had needed to change their role as a result. As one respondent noted 'Excess fabric does not help with hot flushes'.

28% of respondents have been on the receiving end of comments whilst wearing their PPE and, although a small minority reported positive feedback, the overwhelming majority were derogatory. Word Cloud 1 illustrates the kind of comments that women are subjected to for no other reason other than their PPE is ill-fitting.



Word Cloud 1 - Comments women have received whilst wearing their PPE

Women report comparisons with:

- MC Hammer
- A Teletubby
- A sack of potatoes
- Sponge Bob Square Pants
- An Umpa Lumpa
- Robocop
- Oliver Twist.

Other comments included:

- "You look like a kid playing dress up"
- "Can you breath in that?"
- "Are you wearing your Dad's clothes?"
- "Here comes the elephant"
- "Your boobs look big in that"

This behaviour has both a detrimental effect on individuals and on the organisations they work for. For example, women report being delayed by having to send special requests for PPE that fits and therefore being put off going on site visits. One woman explained that she ended up taking time off sick when pregnant rather than face the humiliation of PPE that had become even more ill-fitting. Others said that they felt utterly unprofessional and a few that badly fitting PPE had caused permanent damage to their bodies.

### A footnote on footwear

Some women would prefer to buy their own footwear and be reimbursed for doing so, not least because of the length of time it takes to procure and receive appropriate fittings. In addition, it appears that a lot of women's safety footwear comes with standard pink linings and/or laces and that this is a wide source of irritation. 'Do not pink it and shrink it. Because it still does not fit. And I hate pink'.

