



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 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. In this report we will focus on energy, as it represents a sector in which Prospect has a major interest, including over 2000 female members. Moreover its a sector with significant scope to improve its provision of PPE to women workers.

Provision of PPE

Within energy 86% of respondents stated that their employer provides PPE for individuals, with 10% providing it as part of an equipment pool.

Overall 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. Within energy cleaning by the employer compares well with other sectors, but energy workers fare less well on storage arrangements. 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%

Table 1 - Who is responsible for PPE?

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Overall 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. This may be explained in part by the gender composition of the workforce.

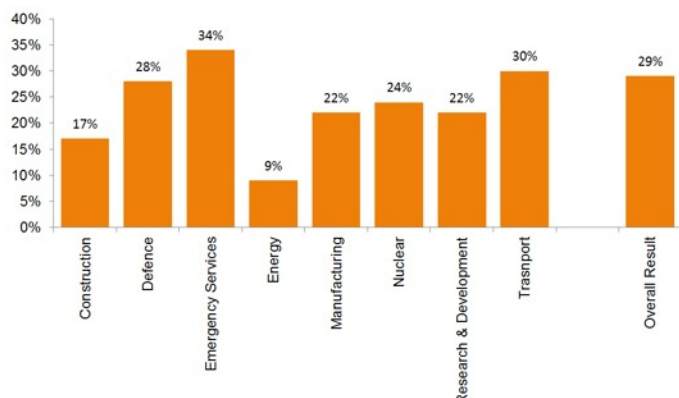


Chart 1 - Is your PPE designed for women?

Overall 13% of respondents reported that their employer does provide an alterations service for standard PPE. Within energy the picture is marginally better with 18% offering the service

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, by far the largest group, have the least comfortable, though energy fares second worst. Overall

trade union members have more comfortable PPE than their non-unionised counterparts. When asked to describe the fit of specific PPE items, respondents in energy identified trousers, overalls, jackets and gloves as least likely to provide a suitable fit, as shown in table 3:

	How well does your PPE fit?					
	Good		Ok		Not Suitable	
	Energy	Overall	Energy	Overall	Energy	Overall
Jackets	14%	16%	59%	60%	27%	24%
Gloves	31%	28%	44%	51%	26%	21%
Footwear	37%	34%	49%	49%	14%	17%
Trousers	6%	10%	39%	49%	55%	41%
Headwear	41%	22%	57%	58%	2%	20%
Overalls	7%	10%	50%	56%	43%	35%
Eye Wear	49%	20%	45%	71%	6%	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. Moreover items such as trousers and jackets rate lower amongst those working in energy than in most other sectors. However, and on a more positive note, headwear (2%) and eyewear (6%), are rarely reported as unsuitable. It is interesting to speculate if these items have a higher satisfaction rating because there is less variation in fit by gender than other items of PPE worn by energy workers.

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

	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
Overall*	6%	5%	12%	13%	18%	15%	14%	9%	3%	4%	521

Table 2 - How comfortable is your PPE? (*Overall excluding Emergency Services)

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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 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%
Overall*	7%	38%	31%	24%

Table 4 - Does PPE hamper your work? (*Overall excluding Emergency Services)

Within energy 12% of respondents had worn standard PPE during pregnancy, however none had worn maternity PPE. Of these, over two thirds of respondents had been able to continue their role until their planned maternity leave. But the remaining third were forced to curtail their duties due to ill-fitting PPE

Just 14% of respondents had worn PPE during menopause and, of these, 83% had continued comfortably in their usual role. However 8% had needed to curtail the normal range of their duties and 8% had needed to change their role as a result.

42% of energy sector respondents have been on the receiving end of comments whilst wearing their PPE (compared to 28% overall) 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?”
- “Here comes the elephant”
- “Your boobs look big in that”
- “Lovely glittery laces in your pink safety boots”

Whilst these comments may not have been made with malicious intent, none the less this behaviour has both a detrimental effect on individuals and on the organisations they work for. Frequently being subjected to remarks for wearing PPE has made respondents try to avoid situations such as site visits. Moreover respondents who are told they look unprofessional may end up seriously questioning their own ability to do the job, when such an issue should never be in question.

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’.

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What would make it better?

Respondents were given the opportunity to suggest improvements to their PPE. 2293 overall provided comments, of which just 28 were positive. Word Cloud 2 summarises the main themes of the responses for those working in energy. :



Word Cloud 2 - Improvements to PPE that women would like to see

Respondents wanted to see:

- An equivalent range of options in women's sizes as in men's as standard. Women are concerned that if you have to make special orders that take additional time to organise 'it makes you feel like you are being a nuisance'.
- An appropriate and accurate measuring system and/or place where PPE can be tried on.
- Better management of pool PPE – it was noted that the range of sizes available narrows significantly after the first working day of the week.
- Better practice replicated across a wider range of employers. For example, a number of women were aware that there are lighter weight versions of PPE available that are not currently provided by their employer. Others noted that although they were only offered two pairs of boots to try, there is in fact a much wider range available.
- Storage facilities being made routinely available.
- Better availability of changing and toilet facilities. For example women, unlike men, have to be able to remove boiler suits in order to use the toilet.

All of these are changes that would help self-confidence. As one respondent noted, 'It is difficult to supervise contractors when your PPE doesn't exactly make you look competent'.

It is worrying to note that a small proportion of women do not wear their PPE due to the discomfort it causes them. This is especially prevalent in the emergency services. One woman admitted that she no longer wears her stab vest following mastectomy because of the degree of discomfort that it causes.

It can be done – so what's the barrier?

The problems faced by our respondents with their PPE to some extent reflect the wider challenges faced by women working in male dominated industries. Respondents noted that 'In these circumstances larger men's sizes are often the only thing available – which makes women look ridiculous. In male orientated areas of work women are already facing an uphill battle and when they 'start making a fuss about PPE' it is seen as being disruptive and going against the ethos of the existing work culture i.e. someone you wouldn't want in your male orientated team'.

However equipping workers properly should not be seen as optional and it can be done: As one respondent stated 'My current employer is the first in my 15 year career who has altered PPE to suit my size, incredible since my current employer is an SME of less than 100 people'.

One respondent appealed 'Please help women to help your business.' To achieve this all stakeholders have a role to play :

Employers need to consider:

- Is PPE consistently provided in a range of sizes across all sites and functions?
- Who makes the purchasing decisions about PPE and on what basis?
- Are there appropriate facilities to try on PPE and, if necessary, to get it altered?
- Would it be more pragmatic to reimburse regular PPE users to obtain items that do not require corporate branding e.g. footwear?
- Are women's changing and toilet facilities available at all locations?
- Consider pregnancy and menopause when providing PPE for women workers

Suppliers need to consider:

- Are ranges of PPE and pricing policies are sufficiently inclusive?
- What customer feedback they receive and who from?
- How could they help to lead improvements in the availability and comfort of PPE?

Unions need to consider:

- Has feedback and involvement of women PPE users been actively encouraged?
- Is there a proportionate number of female health and safety representatives in each workplace?
- How could male PPE users also benefit from PPE improvements?
- How to raise awareness of the legal requirements concerning the provision of PPE and to ensure that they are enforced

All stakeholders need to work together to:

- Raise awareness of these issues.
- Challenge cultures and unconscious bias in male-dominated workplaces.
- Monitor progress or lack of it and call decision-makers to account.
- Publicise successes and share good practice.