

COSHH and current practice

Improving the usefulness of guidance
for dutyholders

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Simon Bates & Daniel Greaves

Health and Safety Laboratory

Harpur Hill

Buxton

Derbyshire

SK17 9JN

Guidance on the Control of Substances Hazardous to Health Regulations (COSHH) has been recently revised (INDG136 Rev4). Before publication, HSE wished to test whether this new format would properly engage and inform the target audience of Small and Medium-sized Enterprises (SME's) and, especially, micro-businesses. The overall aim of this project was, therefore, to gather indicative feedback from this intended user group about the utility and usability of the draft version of the new COSHH guidance, and suggestions for improvements.

The new draft guidance document was considered to be broadly acceptable, comprehensible, and usable by the end-user community of SMEs and micro-businesses. Evidence from the three focus groups points to a number of key areas within the guidance that address the main issues of COSHH risk management. The guidance was described as:

- containing appropriate amounts of information;
- using language of an appropriate level;
- being usable in the practical way intended such that it addresses the realities and practicalities of a wide range of workplace settings.

This suggests that the document is perceived as being both comprehensive and appropriate to the needs of the end-user community.

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EXECUTIVE SUMMARY

Objectives

Guidance on the Control of Substances Hazardous to Health Regulations (COSHH) has been recently revised (INDG 136 Rev4). Before publication, HSE wished to test whether this new format would properly engage and inform the target audience of Small and Medium-sized Enterprises (SME's) and, especially, micro-businesses. The overall aim of this project was, therefore, to gather indicative feedback from this intended user group about the utility and usability of the draft version of the new COSHH guidance, and suggestions for improvements.

Main Findings

The new draft guidance document was considered to be broadly acceptable, comprehensible, and usable by the end-user community of SMEs and micro-businesses. Evidence from the three focus groups points to a number of key areas within the guidance that address the main issues of COSHH risk management. The guidance was described as:

- Containing appropriate amounts of information
- Using language of an appropriate level
- Being usable in the practical way intended such that it addresses the realities and practicalities of a wide range of workplace settings.

This suggests that the document is perceived as being both comprehensive and appropriate to the needs of the end-user community.

Suggestions for improvement

Whilst the outcomes of this research are generally positive, it must be noted that there are a number of amendments suggested by the target audience that would further improve the new guidance document. One suggested improvement was for the inclusion of additional pictures to aid engagement with the document. The myths and realities boxes contained in the document were well received, suggesting that these are a useful way to engage SME and micro-business duty holders with the subject of COSHH risk management. It was suggested that acronyms should be kept to a minimum, and clear and common language should be used throughout. Whilst overall the language was found to be couched at an acceptable level, a suggestion was to reword a small number of phrases in order to maintain comprehensibility of the guidance for the target audience.

It was further suggested that examples used in the document should be drawn from as wide a range of industrial sectors as possible to ensure maximum engagement with the document. When examples are clearly relevant to the reader, engagement with the key messages is engendered. The provision of risk assessment examples would also address a need in the end-user community. This however needs to be balanced with the size of the document. The HSE website contains a number of risk assessment examples relevant to a wide range of industries, and this should be clearly referred to in a number of locations throughout the document.

Additional formats such as a poster to accompany the guidance could have benefits such that the key messages would be clearly visible in workplaces for all employees without their necessarily having to read and absorb the whole document. Regarding the front cover of the document, the suggestion was to keep the front cover images immediately recognisable and relevant, and to use the colour red due to its widely accepted associations with hazards and importance. Additional marketing and publicity efforts could help improve the awareness of duty holders regarding their responsibilities in relation to COSHH.

Recommendations

Overall, this research was a valuable exercise, enabling a clearer understanding of the needs and views of the SME/micro-business audience in relation to COSHH guidance. The new draft guidance document was generally well received, but would benefit from some simple amendments to improve its impact still further. These include:

- Consider additional pictorial/diagrammatic content
- Consider the relevance of pictures to ensure that they are as diverse and inclusive as possible
- Use real-world images rather than abstract ones
- Consider additional examples of workplace contexts, where appropriate, to ensure diversity
- Include fewer acronyms, or include a glossary of acronyms
- Simplify the language in certain areas
- Ensure the HSE website link is clearly visible in a number of places throughout the document
- Design the front cover and style with respect to the findings on this aspect of the research
- Consider supplementary formats, e.g. poster to accompany guidance

1 INTRODUCTION

COSHH: A brief guide to the Regulations (INDG136 Rev3) is a leaflet written mainly for employers to help them to meet their specific duties under the Control of Substances Hazardous to Health (COSHH) Regulations. The leaflet takes the reader through eight steps needed to comply with COSHH. There is some anecdotal evidence that, in practice, many duty holders do not follow the stepwise risk assessment, risk management procedure. Rather, they go directly to control measures, primarily Personal Protective Equipment (PPE). Moreover, market research has highlighted problems with the format, content, and style of the current guidance (HSE, 2005). From this research, Small and Medium-sized Enterprises (SME's) expressed the need for practical advice on what they have to do to protect their employees and to comply with COSHH. They did not want to have a list of the Regulations that they needed to interpret.

The Health and Safety Executive (HSE) has recognised the need to revise the guidance and present it in a more user-friendly format to enhance duty holders' engagement with it. HSE drafted a new short version of the COSHH guidance (INDG 136 Rev4) and wished to know whether the new guidance would properly engage and inform the target audience (SME's and especially micro-businesses). The aim of this research was to market-test the new guidance using facilitated focus groups to gather feedback from the end user community (SME's and micro-businesses), on whether the guidance was acceptable, usable, and comprehensible for the target audience. It was also to provide recommendations for improving the new guidance document.

In order to make the most of the evaluation exercise, the Communications Delivery Service (CDS) furnished the researchers with a draft INDG 136 Rev4 in as near to complete state as possible. The provided document was edited and formatted, but not designed, and was perceived by CDS as being ready for use in the practical way intended. CDS also produced 'style' examples on which the focus groups were also invited to comment.

2 METHOD

To address the project aims, the research employed both quantitative (questionnaire) and qualitative (focus group) methodology. Three focus groups with between seven and nine participants each, and each lasting between 90 minutes and two hours comprised the data-gathering phase. The first 20 minutes of the focus group sessions involved completion of usability word choice questionnaires to provide the quantitative element of the research, after which the remainder of the sessions evolved into the semi-structured focus group discussions proper. Both the quantitative and qualitative elements of the focus groups aimed to elicit participants' views on whether the new guidance document was fit for purpose. The research tools can be found in Appendix 1 (usability word choice questionnaire) and Appendix 2 (focus group question schedule). The focus groups were conducted at three city centre hotel venues within a 50-mile radius of the Health and Safety Laboratory (HSL).

2.1 RECRUITMENT OF ORGANISATIONS

As this research was focused on industry sectors where COSHH would be most applicable, potential participant organisation sectors were selected using Standard Industrial Classification (SIC92) codes. The resultant codes were selected and agreed with the customer based on expert views of the degree of relevance of the COSHH regulations to that type of business. As the new draft guidance document was designed to be specifically focused on SME's and, in particular micro-businesses, organisation size was also a key criterion for recruitment. With these factors in mind, a search request was submitted to HSE Information Services Search Team comprising the following search criteria:

- Organisational size (number of employees) – nine or less.
- SIC92 codes (two digit):
 - 15** Manufacture of food and beverages
 - 20** Manufacture of wood and products of wood
 - 24** Manufacture of chemicals and chemical products
 - 25** Manufacture of rubber and plastic products
 - 26** Manufacture of other non-metallic mineral products
 - 27** Manufacture of basic metals
 - 36** Manufacture of furniture & Manufacture not elsewhere classified
 - 45** Construction
 - 50** Sale/maintenance of motor vehicles
 - 93** Other service activities
- Locations: Sheffield, Nottingham, Manchester (postcodes S1, NG1, M1)

Results were requested in the following format: Company name, contact name, address, telephone number, email address, type of business (SIC92 code), size of organisation where possible (number of employees). Interrogation of the ‘Mint’ database (Third party business intelligence and company information database, accessed via HSE Information Services) yielded thousands of potential organisations fitting the search criteria. Participants were recruited to the three focus groups by telephone canvassing. Micro-businesses are known to be difficult to target and encourage to participate in research. To increase the likelihood of participants agreeing to take part in the research participants were offered an incentive of £50 per person attending a focus group. Focus group dates, venues and number of participants are shown in Table 1.

Table 1: Dates and Venues of COSHH focus groups

Date	Focus Group Venue	Number of Participants
24/11/2008	Novotel, Sheffield	7
25/11/2008	Crowne Plaza, Nottingham	9
26/11/2008	Crowne Plaza, Manchester	8

2.2 DATA COLLECTION

Two HSL researchers facilitated the three focus groups. One HSE representative (Paul Evans) was also present at the focus groups in order to offer detailed explanations of COSHH issues where appropriate, and to gather first hand feedback from the end-user community. All focus groups were audio recorded, with the consent of all participants. Participants were also given assurances of the confidentiality and anonymity of the information being collected. The focus group sessions progressed through the various phases, guided by the lead HSL researcher. Participants were initially asked to consider the usability word choice questionnaire, and complete it in relation to the new guidance document (all focus group participants received the new guidance document through the post at least two days before the focus group sessions). The next stage comprised the main semi-structured discussions regarding general background on the current situation, and acceptability, comprehensibility, and usability of the new guidance document. Finally, the participants were asked to consider five front-cover options and two overall style options for the new guidance document, comment on their preferences, and provide some justification for their positions.

2.3 DATA ANALYSIS

The data analysis consisted of two elements: Quantitative analysis for the usability word choice questionnaire data, and qualitative analysis for the focus group discussion data. The usability word choice questionnaires were analysed using quantitative methods (count data) in order to describe the questionnaire results. Quantitative data is any material that can be quantified in some way and is numerical in nature (Creswell, 2003). It allows the researcher to determine the amount or level of a variable, for example in this case, focus group participants’ perceptions of the new draft COSHH guidance document.

The focus group data were transcribed verbatim from the audio recordings of the three focus group sessions. The researchers also transcribed any notes taken during the focus group sessions. The researchers separately analysed the focus group data using a thematic analysis approach. An inductive approach was used to allow themes to emerge from the data (Patton, 1990). Two researchers analysed the focus group data to ensure reliability within the data analysis process. Once the data analysis had taken place, and themes from the data had emerged and been captured, the two researchers met to compare their respective findings and discuss salient issues. The themes that emerged from both sets of individual analyses were congruent and as such support the reliability of the outcomes of the data analysis. The analysis allowed the identification of the key issues concerning the acceptability, comprehensibility, and usability of the new draft COSHH guidance document.

3 RESULTS

A total of 24 organisations were represented at the three focus groups, from a variety of backgrounds/workplace contexts, as shown in Table 2.

Table 2: Focus group participants' backgrounds/workplace contexts

Sheffield (7)	Nottingham (9)	Manchester (8)
Vehicle battery services	Adjustable bed manufacturer	Motor factor
Hairdresser	Marquee hire	Motor vehicle garage
Mechanical engineering	Motor vehicle services	Lifting contractor
Woodworking	Roofing contractor	Dry cleaning services
Brewery	Hairdresser (2 instances)	Interiors contractor
Motorcycle services	Beauty therapist	Hairdresser (3 instances)
Paving contractor	Care home (2 instances)	

3.1 USABILITY WORD CHOICE QUESTIONNAIRE

The first phase of the focus group sessions involved considering the new draft guidance document in the light of the questions posed in the Usability word choice questionnaire (see Appendix 1). Results were compiled on a flip chart so that focus group participants received immediate feedback on their answers to the usability word choice questionnaire. This feedback was useful for both the researchers and the focus group participants as it provided an indication of the general feelings in the groups towards the new guidance document. This 'icebreaker' activity helped focus the groups on the subject matter, and served as a gentle introduction to serious consideration of the new guidance document: the whole purpose of the events.

3.1.1 Usability Word Choice Questionnaire Step 1

Focus group participants were initially asked to read over the list of words in step 1 of the usability word choice questionnaire (see Appendix 1, step 1), and tick as many of those words as they wished that described their experience with the new draft guidance document. The four highest counts of words that participants considered to describe their experience with the new guidance were

- useful (21),
- clear (17),

- easy to understand (17), and
- good practice (12).

The results for step 1 of the usability word choice questionnaire are shown in Table 3, and Chart 1 (see Appendix 3).

Table 3: Usability Word Choice Questionnaire Step 1 Results

WORD	SHEFFIELD	NOTTINGHAM	MANCHESTER	COUNT
Useful	7	9	5	21
Clear	6	8	3	17
Easy to understand	4	8	5	17
Good practice	5	5	2	12
Friendly	2	6	3	11
Relevant to me	5	3	2	10
Straightforward	3	4	2	9
Businesslike	2	5	1	8
Effective	2	4	2	8
Flexible	2	4	1	7
New	1	3	3	7
Comprehensive	0	3	3	6
Consistent	2	1	1	4
Familiar	3	1	0	4
Simplistic	2	1	1	4
Attractive	1	2	0	3
Too technical	2	0	1	3
Boring	1	0	1	2
Off-putting	2	0	0	2
Sketchy	2	0	0	2
Stressful	1	1	0	2
Irrelevant	1	0	0	1
Misleading	1	0	0	1
Overwhelming	0	0	1	1
Trusted	1	0	0	1
Confusing	0	0	0	0
Contradictory	0	0	0	0
Patronising	0	0	0	0
Rigid	0	0	0	0
Time wasting	0	0	0	0
TOTAL	58	68	37	163

3.1.2 Usability Word Choice Questionnaire Step 2

Focus group participants were then asked to read over the list of words that they selected in step 1 of the usability word choice questionnaire (see Appendix 1, step 2), and circle the three words they selected that they felt were most descriptive of the new draft guidance document. The four

highest counts of words that participants considered to be most descriptive of their experience with the new guidance were

- easy to understand (11),
- clear (10),
- useful (8), and
- good practice (7).

The results for step 2 of the usability word choice questionnaire are shown in Table 4, and Chart 2 (see Appendix 3).

Table 4: Usability Word Choice Questionnaire Step 2 Results

WORD	SHEFFIELD	NOTTINGHAM	MANCHESTER	COUNT
Easy to understand	2	5	4	11
Clear	3	5	2	10
Useful	3	5	0	8
Good practice	2	4	1	7
Comprehensive	0	2	2	4
Relevant to me	3	1	0	4
Businesslike	0	1	1	2
Sketchy	2	0	0	2
Boring	0	0	1	1
Consistent	1	0	0	1
Familiar	1	0	0	1
Friendly	0	0	1	1
Overwhelming	0	0	1	1
Straightforward	0	1	0	1
Trusted	1	0	0	1
Attractive	0	0	0	0
Confusing	0	0	0	0
Contradictory	0	0	0	0
Effective	0	0	0	0
Flexible	0	0	0	0
Irrelevant	0	0	0	0
Misleading	0	0	0	0
New	0	0	0	0
Off-putting	0	0	0	0
Patronising	0	0	0	0
Rigid	0	0	0	0
Simplistic	0	0	0	0
Stressful	0	0	0	0
Time wasting	0	0	0	0
Too technical	0	0	0	0
TOTAL	18	24	13	55

3.1.3 Usability Word Choice Questionnaire Step 3

Focus group participants were then asked to read over a further list of statements (see Appendix 1, step 3), and tick as many of those statements as they wished that they agreed with in relation to the new draft guidance document. The top four highest counts of statements that participants agreed with in relation to the new guidance were 'I would use this guidance' (16), 'I think this guide might work' (11), 'I could use this guide' (9), and 'I think this guide will work' (9). The results for step three of the usability word choice questionnaire are shown in Table 5, and Chart 3 (see Appendix 3).

Table 5: Usability Word Choice Questionnaire Step 3 Results

STATEMENT	SHEFFIELD	NOTTINGHAM	MANCHESTER	COUNT
I would use this guide	4	9	3	16
I think this guide might work	3	3	5	11
I could use this guide	2	4	3	9
I think this guide will work	1	6	2	9
I want to use this guide	2	2	2	6
I don't know if this guide will work	3	0	2	5
I can't use this guide	0	0	0	0
I won't use this guide	0	0	0	0
I think this guide can't work	0	0	0	0
I think this guide won't work	0	0	0	0
TOTAL	15	24	17	56

3.1.4 Usability Word Choice Questionnaire Step 4

For the final step of the usability word choice questionnaire exercise, focus group participants were asked to place a mark along a line between two end-points labelled 'Like' and 'Dislike' in response to the question: What do you think of the guide? (see Appendix 1, step 4). HSL researchers quantified the responses to this question by placing a transparency grid, split into five even sections, over the response line, thus providing a five point scale between like and dislike into which the participants' responses were categorised. Of the five possible response brackets, three were in the top bracket closest to 'Like', thirteen were in the next bracket down, and seven were in the middle bracket, halfway between 'Like' and 'Dislike'. One focus group participant in Manchester did not complete this section of the usability word choice questionnaire. The results for step four of the usability word choice questionnaire are shown in Table 6, and Chart 4 (see Appendix 3).

Table 6: Usability Word Choice Questionnaire Step 4 Results

QUANTIFIED RESPONSE	SHEFFIELD	NOTTINGHAM	MANCHESTER	COUNT
5 Like	0	2	1	3
4	5	5	3	13
3	2	2	3	7
2	0	0	0	0
1 Dislike	0	0	0	0
TOTAL	7	9	7	23

Following the usability word choice exercise, the focus groups' attention was guided towards the main body of the sessions: The semi-structured discussions about their current approach to control of exposure to substances harmful to health, and, more specifically, the acceptability, comprehensibility, and usability of the new draft guidance document.

3.2 QUESTIONS ON THE CURRENT SITUATION

3.2.1 Controls

Focus group participants offered a variety of views regarding current control measures in place in their respective organisations. All participants mentioned Personal Protective Equipment (PPE) as a control measure to protect employees from COSHH related risks in the workplace, as suggested by the comments:

'We wear things like gloves'

'We use generally just masks because the biggest danger is dust in what I do'

'Yeah, protective aprons and things'

'There's a lot of common sense involved ... at the time we used to use or sell oils and aerosols and paints, battery acid, we used to take precaution. We've got all the gloves, usual kind of thing and that was really as a result from reading the COSHH information'

However there were also a number of suggestions that PPE was not as widely used as it should be. Engineering controls such as Local Exhaust Ventilation (LEV) were mentioned less frequently in the focus groups. Whilst this type of control was present in some organisations (e.g. woodworking), there were suggestions that the maintenance and servicing procedures of LEV systems were not as rigorous as they could be. Product segregation was used in a number of organisations, and there was some discussion regarding risk assessments for each product/task being in place, although the use of this more thorough approach was not widely evident.

'Control measures we just keep all the peroxides in a cupboard. We use gloves but don't use them all the time...we have eyewashes'

'The area you are working in - we use a designated area for the acid...must be considered as much as possible with what you've got to work with'

'We did not choose it [LEV] in a theoretical sense. There's no real option you've got to shift the waste and with the waste goes the dust ...which because of our background ... we are familiar with extraction'

3.2.2 Information

Focus group participants reported obtaining useful information on hazardous substances from a number of sources, including trade associations, suppliers, manufacturers, and external consultants. Some suppliers and manufacturers were criticised for information overload, particularly in the area of incomprehensible safety data sheets, whilst other suppliers were criticised for providing too little information with hazardous products.

'We have an advisor who gives us advice when needed'

'And they [chemicals] all come with complete instructions how to use and first and foremost how to dispose of them safely'

'... There's a Hairdressing Association that you pay in to ... We've got it ... We have got lots of information ...'

3.2.3 Training

Employee training and awareness raising were considered by many focus group participants to be an essential part of the COSHH risk management efforts in their respective organisations. Whilst this benefit was widely recognised, there was further discussion regarding the need to engage in additional training and awareness-raising activities to maintain health and safety performance.

'Management should be trained really well because the managers of all businesses should be trained ... for the employees definitely'

'I think personally there should be more information provided for the employee by the use of an [information] board in the areas of risk'

'But that's all you learn at college, and since I was at college. So we just get on with it really'

'So there's just nothing like that in the colleges that tell you what to do and how to go about doing it'

3.2.4 Employee Engagement

A significant number of focus group participants recognised the value of employee engagement in the process of managing COSHH related risks. The benefits of a fully engaged workforce were suggested to be wide-ranging, beyond health and safety performance.

'I also think that perhaps regular staff meetings perhaps once a month just to ensure that people are adhering to what's written down and allowing employees voice to add or take away from what's there'

'Involve them, yes, that's teamwork isn't it'

'I think if on this board there was a list of all the risks so the employee can get involved, he can also make his own comments and there could be a monthly check on this board'

'Complacency from the employee is very hard to overcome'

'They wouldn't not wear gloves. They wouldn't not wear them, they wouldn't ...'

'It [safety file] was daunting, and it was there for employees to look through but no, they wouldn't look through it'

Some participants noted the variability in their employees' willingness to engage and be responsible with the COSHH risk management process, and highlighted the challenge of employee complacency regarding use of control measures. Further to this, focus group participants noted the value in highlighting employees' responsibilities in the risk control process, emphasising that both the employer and employee have responsibilities to each other. Participants also discussed their actions taken to control COSHH-related risks in terms of generating evidence to support a defence against potential litigation directed at organisations from its employees. Evidence of actions taken to control risks was also suggested to assist organisations in obtaining insurance cover.

'The employee would also make the employer look, as well as the employer would make the employee look. You're all responsible, not just one person, but we all need to, I think, be responsible because we all need to keep an eye on each other really'

'There's two sides to it - covering yourself and wanting to protecting people....we need to protect ourselves and the business'

3.2.5 Barriers to COSHH implementation

A number of barriers were mentioned regarding the full implementation of COSHH guidance. The most common of these were time, money, and the general pressures of work.

'... and in some cases it wouldn't happen because again the pressures of work'

'Another one as well is time factor ... when you're dealing with COSHH and you are using a material for the first time you need to find the information and the answer within an hour or so'

'Obviously at the end of the day, you want to get a job done right and safety's paramount but it still boils down to the cost of products. You've got to get a happy medium haven't you?'

'I think people need to know why it's a good idea to do it because it could be very expensive'

During the focus groups, the researchers noted a degree of variability in willingness of duty holders to engage with health and safety legislation. However, all focus group participants recognised the need to comply with the law in order to avoid enforcement action, and maintain a viable business.

'I think it's much ... all your documents; you are under the illusion that people give a damn. The small business man who is not a multinational...you're pulled dragging and screaming to the trough of doing what we've got to do and the only way you are going to get anybody taking notice is to have something to the effect of "read this document and do what it says or your business is at risk"...you flick through it and say I've got better things to do'

3.3 ACCEPTABILITY

The new guidance document received generally positive views from the groups overall in terms of its acceptability, with the end-user community reporting its utility in furnishing them with the relevant information appropriate for the hazards they encounter in their jobs. Participants also found the document to be a useful signposting guide for further information, with the link to the HSE website being widely recognised as a valuable element of the guidance.

3.3.1 Relevance of Information and Impact

There was widespread agreement across the three focus groups regarding the acceptability of the new COSHH guidance document. Focus group participants reported a number of general positives, for example:

'Well it's quite hard to sum up, the book's great; it works for me'

'... But you know everything you say is in there if you read, it [is] fair/reasonable enough'

'Well you sort of know what you're looking for and these are the things that you're doing anyway and it's nice to have it written down there'

When asked to comment on the new draft guidance document's relevance to hazards commonly found in the workplace and whether the new draft guidance document contained the right information, focus group participants reported general agreement, for example:

'It has a good foundation, that's how I see it ... it's telling us information of where to go ... that was the main thing'

'There is some very good stuff there but if you didn't actually take the trouble to read the bibliography at the end you know you would actually find things like that, you know which is very good'

There was also evidence of new information gained and risk control actions taken as a result of the new draft guidance document:

'Yeah I started putting all of my little pots with acrylic and looking at it ... and had some of these toxic stickers on but yeh ... it did make me think'

3.3.2 Comprehensiveness and Clarity of Information

Focus group participants commented at length regarding their understanding of the new draft guidance document. Issues discussed covered a number of areas, for example, the level of and clarity of language. Participants were cognisant of HSE's efforts to simplify a complex topic, and there was widespread agreement that the new draft guidance document was fit for purpose. Comments include:

'It's remarkably clear'

'No it's pitched just right'

'I think it gets the point over on most things'

'I don't think you can condense it anymore because what we are basically looking at we are from different backgrounds and we are, we use different chemicals or harmful substances so it's trying to cover everybody'

3.3.3 Structure of Information

Overall, the information was seen as well structured, although there were a number of suggestions regarding potential improvements, generally around the areas of signposting to additional information, the usefulness of examples, the conciseness of information, and linking to the HSE website. Comments include:

'This thing about linking it to the website is great...just something to highlight it. However, the link was not highlighted enough...maybe on each page just so there is a reference'

'Go to the HSE website for examples, the information was quite useful and one of the best things I had seen in this'

'Putting websites at the top of the page like the lady said...it's a neat one... it might trigger a few problem solves'

Having examples in the document was found to be useful:

'Not enough examples in the document...oily rags...if it was multiplied up by 10 or 20 I think it strikes it home much more'

'It's certainly a reminder...when people have got examples...it hits home more'

It was further suggested that the document would benefit from the information being more concise and better laid out:

'Yes, I think it is, it's too big, it needs to be condensed in a nice little booklet form with a contents page so that you can dip in as opposed to having to wade your way through'

'I think its easier to read, It shouldn't pose any difficulty on just understanding what its trying to get across ... I liked the links to some of the sites where you can find more information...I didn't really like the link when I got there but it was good that there was a link to answer any more questions that you might have'

'It probably does cover it, but you've got to search to find it'

'It needs breaking up a little bit ... it's in different fonts and some things in boxes and doesn't really flow ... you could do with a contents...where you can add to it...there's a lot of text there but you are drawn to the example, there's a checklist, it's easy to read, it's in boxes and it's broken up but the rest of it ... does not necessarily deal with one topic on one or two pages...I think it is set out to make it easier to understand but personally I think it could be set out better'

3.3.4 Practicality

Focus group participants reported generally positive feedback regarding the practicality and utility of the new draft guidance document, and provided the researchers with confirmation that the document could be used in the practical way intended. Comments include:

'The checklist [for choosing control measures] there is quite good to go through'

'It definitely made me aware of some of the responsibilities, there's no point just knowing - you have to put it into practice as well ...some of my employees are not using it because they are a bit lazy'

'It reminds you of things that you should be aware of even if you thought you knew before'

3.4 COMPREHENSIBILITY

The overarching themes that emerged from the data analysis regarding focus group participants' perceptions of the comprehensibility of the new guidance document can be broadly grouped under the following headings: Language and Acronyms, Presentation, and Fit for Purpose. Participants were generally appreciative of the efforts made to simplify a complex topic, and in most cases found the level of language used in the draft guidance document to be satisfactory and clear, although there were some instances where the language was reported to be overly complex. Acronyms were reported to be confusing in some cases, and participants reported a preference for acronyms to be kept to a minimum in order to maintain engagement with the document. Participants offered a number of suggestions for improvements, particularly in relation to the utility of additional diagrammatic content, which they felt would improve the impact of, and engagement with, the document. A table of acronyms was also suggested as a potential addition to the document to aid comprehensibility. Overall, participants felt that the draft guidance document was fit for purpose, but would benefit from some minor alterations in presentation.

3.4.1 Language and Acronyms

Focus group participants considered the document to be both understandable and informative.

'Pretty straightforward, I don't think it talks down to you or its too technical and jargon, you know people being confused by the content'

'Its just about right actually because if you make it too long you know people lose their interest by the time you get to the part that might be important to them'

However, some criticism was raised in terms of the use of acronyms, and a small number of instances where the language was not as easy to understand as it could be.

'[The phrase:] 'extracted enclosure' ... is not very clear ... you get into a jargon and acronyms! It's not very clear'

'Natural materials are not harmless, I thought there was an error there, it should have said natural materials CAN be harmful'

'It needs to be simplified in certain areas as I am looking at this 'do you design and run your processes to minimise the emission and spread of contaminants'... for me you have to read it twice'

3.4.2 Presentation

Focus group participants commented on aspects of the document that they felt would make it as presentable as possible to aid comprehension in terms of format, layout, order of information, and the usefulness of the boxes containing examples of popular myths. Participants also proffered views on potential ways to improve the impact of the document on the target audience.

'I think its sufficient, I just keep going back, keep returning to the layout really, the actual presentation of it'

'Hit them with the example then give them the information afterwards... [For example:] ... the example and then the information underneath would theoretically could work quite well'

'About the examples, hard to know where to bring the examples in? I kind of feel the examples have been placed in the middle and [could be] better if they come before/after or mixed in? I don't know the answer'

'I must admit the myth bit did catch my eye'

'Yeah maybe more what can happen, a bit more descriptive, so it brings it home a bit more'

'Is important that people do not get bored after page 2'

Focus group participants offered numerous suggestions regarding potential improvements for the presentation of the new COSHH guidance document. Suggestions were primarily in the areas of document content fine tuning, making the most of images, and more clarity in explanation of unfamiliar information.

'Could you develop icons for risk assessments or observation of tasks that become logos for those particular areas and then you use them repeatedly in your document, in your brochures and stuff'

'I think the pictures are quite good though...symbols to each paragraph, just put a little picture because they work as a contents mechanism in your head anyway, you know if you've got like a marker'

'You can't underestimate the power of pictures'

'Illustrations work well'

'What about more graphic pictures, corrosive substances and an actual photo of a hand or something that's been subjected to acid'

'[Myths and realities] could be highlighted even more and the idea of the cartoons. The headings highlighted more...things like that have to be in your face...draws your attention'

'How the employer can control and communicate to the employees and how they can build this team environment - employee engagement, could it mention how you could stimulate the employer/employee relationship within the booklet?'

3.4.3 Fit for Purpose

The dominant view across the three focus groups was that the new guidance document was fit for purpose in its current state, with the proviso that certain suggestions (outlined above) may improve the overall end-user experience with it. Focus group participants considered the document to be thorough, covering a lot of ground in a relatively short document, and relevant to a wide range of industry sectors. Comments include:

'[I would] probably find there's more than I naturally need in my business but it covers a multitude doesn't it'

'Well it's easy you have got one to seven in order of priority [when choosing control measures]...but if you used that as a baseline then you would be pretty much spot on wouldn't you'

'Yeah, 'cause if you wanted any more, you know where to look for it now, don't you'

'At the end of the day what you want is actionable information, I mean a lot of general guidance you know is a bit ambiguous'

'Well you sort of know what you're looking for and these are the things that you're doing anyway and its nice to have it written down there'

'All I'm saying is that it brings the message across'

3.5 USABILITY

Participants felt that COSHH awareness raising would benefit from additional materials in different formats, for example, a poster outlining the key messages in conjunction with the new guidance document. Whilst agreeing that the guidance addresses the realities and practicalities of the various workplace contexts represented in the focus groups, participants felt that additional examples could be incorporated to ensure the final version is as diverse and inclusive as possible. Participants also acknowledged the challenge of communicating the existence of the new guidance document to duty holders, and suggested various potential avenues for additional marketing efforts, for example, television and newspaper advertising campaigns. Leadership style and employee engagement were touched on, with participants recognising the need for the latter in order to achieve maximum benefit from the guidance, although the dominant leadership style evident in the focus groups was of a directive nature, and as such may not be the style most suitable for engendering optimum employee engagement.

3.5.1 Presentation format

Focus group participants offered a number of suggestions regarding the variety of formats in which the information could be presented, and the potential usefulness of such a variety of formats to aid usability and get the message across to employees. Comments include:

'A ring binder with laminated pages in A5 with ring binders...we're talking about a picture book...it looks valuable ... something you should keep...interesting to look through. It would work for me and younger people'

'A checklist on the wall idea is very simple and could be policed very easily'

'A picture book for employers and employees could look through and it'll be there all laid out'

'The booklet should be accompanied with a big poster like the health and safety one'

'Put it on a laminate and leave it in the staff room I suppose then you can look at it all day'

'An introduction to this...sets the stall out i.e. 'this is a guide to help the employer run your work environment' ... and would make the document clear and more stimulating to the reader'

'I can't see a booklet like that being passed around to every new kid that comes to work for you'

3.5.2 Additional Examples of Comments relating to Usability

The majority view across the three focus groups was that the new draft guidance document was usable such that it was understandable and addressed the realities and practicalities of the workplaces represented in the focus groups. Some criticism was raised in terms of lack of explanation of the International Hazard Symbols that were included in the illustration of safety data sheets, and perceived lack of variety of examples of workplace contexts within the document, with a preference expressed for more variety across industrial sectors. Comments include:

'Sorry, some of the symbols [International Hazard Symbols] ... I wouldn't know them unless they are explained...just thought an explanation in the booklet'

'Perhaps these [International Hazard Symbols] could be used more like a reference...inside cover or back cover'

'If you have five examples try to make them as diverse as possible ... then refer to the website'

'Maybe in the examples... thinking about hairdressing... just something to make it a little more diverse'

'Would it pay to show an example of a risk assessment?'

'Unless there was a table of contents where you itemised the various examples of risk assessments so that people knew straight away that they were not expected to read the whole document, there was a risk assessment in there that was aimed at your particular trade. I would then look at the risk assessment and use my common sense'

3.5.3 Employer Responsibility to Communicate

Focus group participants were generally supportive of the view that the new guidance document would be usable in their respective workplaces, whilst recognising that there is significant onus on the employer to cascade the information down to employees, and a degree of willingness

would be required in employees to engage with the information, and be responsible. Comments include:

'It freshens your skills ... you inform your employees and all that so it's alerting sort of development and awareness'

'Well it makes you more practical once you've read it'

'It's only as good as the person who is leading the effort ... it all comes from the person who is leading it and so needs to enthuse the person who needs to read it'

'I will be forcing it more once I have gone through it again, do you know what I mean'

Potential barriers to the fully successful implementation of the new COSHH guidance document mentioned by focus group participants included directive leadership style, lack of employee engagement, and shared responsibility and, to a lesser extent, lack of access to the Internet for employees.

'It always depends on the leader...but I think it comes back to the, instilling of the leader or boss or whatever'

'You make it sound like the onus is on the employer, surely its beneficial for the members of staff to know this as well?'

'[Employers should] make every effort to put the message across and you've done everything you can'

'I don't think that employees will have access to the website when they're on the job'

'It's down to you to enforce it ... like safety boots...you've got to wear them ... they will then conform ... if you keep letting it go they will walk [over you]... you have to do it'

'Should not be...it's law ... should not be any difficulty in implementing it to your staff'

3.5.4 Communication Strategy

Communication was considered by the majority of focus group participants to be an essential element of the strategy to ensure maximum impact from the new guidance document on the end-user community, and to this end, a number of marketing suggestions for potential communication strategies were proffered. Focus group participants also recognised the importance and potential challenges of communicating the new COSHH guidance to employees, ensuring their buy-in to the process and adherence to the guidance, particularly in transient workplace environments. Comments include:

'I think that one of the problems is communicating the whole thing'

'Look I think you know you've really got a little nugget here and all you've got to do is expand it. And the way to expand it is to involve the supermarkets'

'You'll have to go on television won't you and newspapers and do the advertising or something'

'It would be nice to see them [employees] all get one of these [new guidance document] actually'

'Employee responsibility for themselves ... and one of those responsibilities to their self is if they have seen a potential hazard ... it should be recorded'

'People are lazy...I don't know how you impose it unless you make it a disciplinary offence'

'It's all right implementing it when you are on a fixed site in a factory...you can't stand over them'

3.6 FRONT COVER AND STYLE DESIGN OPTIONS

When focus group participants were asked for their immediate responses regarding five different front cover design options, the dominant opinion, recurrent across all three focus groups, was for a main image of the human body, coloured red, and having skin on part of the body and lungs visible through the skin. In addition to this main image, three smaller image boxes containing images of real-world activities relevant to COSHH was the preferred choice. Thus, there was a consistent consensus opinion across the three focus groups regarding the front cover options that participants felt was most suitable for the new guidance document.

Comments supporting this position include:

'Initially [the blue figure with lungs showing, and three smaller abstract images]... seemed to have a lot more warning...I think its because you see the full head and the lungs and everything...seemed to be a bit more... human'

'I agree, it does what it says on the tin... 'cause it got examples and its effects on your body...[the transparent lungs and torso, and three smaller abstract images] looks like an anti-smoking ad...this one [the abstract image of red liquid] looks like don't drink to much red wine...'

'Well I think [the red figure with skeleton showing, and three smaller 'real-world' images] stops you in your tracks and I think that's what the document should do. I really do think [the red figure with skeleton showing, and three smaller 'real-world' images] ... you look at it and you think well let's have a look at this'

'Can I refer you to [the red figure with skeleton showing, and three smaller 'real-world' images] which comes back to your examples and little boxes ... the little boxes throw you examples immediately you could have a hairspray instead of the spraying...it's an example of three hazards'

'I like the lungs in [the blue figure with lungs showing, and three smaller abstract images]'

'No to [the abstract image of red liquid] or [the abstract image of blue smoke] as it relates to cigarettes'

'Yeah cigarettes [the abstract image of blue smoke] and the bubbles [the abstract image of red liquid] almost look like drink'

'[The transparent lungs and torso, and three smaller abstract images] is meaningless to me'

'That [the abstract image of blue smoke] is just a smoking campaign'

'[The abstract image of red liquid] looks like red wine gone bad'

Reasons given for selecting this particular combination of design options were varied, but centred around the significance of the ability to recognise and engage with real-world images rather than abstract images, the idea that the colour red is associated with hazards or danger, and the relevance of the skin and lungs as primary routes of entry for chemicals into the body. Comments supporting this position include:

'[The red figure with skeleton showing, and three smaller 'real-world' images] shows something to do with industry; they are actually doing something'

'It's more the three examples on the page probably don't seem as appropriate, if you put those [three smaller 'real-world' images] ... onto [the blue figure with lungs showing, and three smaller abstract images]...I would personally think that ...would be a good example'

'Red has always been for danger'

'Red is a warning sign'

'The body is good as it gets you to think about yourself and health doesn't it...so that's a really good point for me'

'You could have the arm covered in skin'

'A bit of skin is a good idea'

'The lungs with the red still'

In respect of the additional images selected for the left hand side of the front cover, focus group participants reported a strong preference for real-world images rather than abstract images, and felt that more variety in the trades included in these images would improve the perception of relevance to a wider base of organisational sectors. Of particular note during these discussions was the point that these additional images should not be too workshop focused, and should aim to introduce associations with other trades where COSHH is relevant, for example, hairdressers. Comments supporting this position include:

'I like the [real-world] activities'

'I like the three [real-world] pictures'

'Because it's COSHH with you know substances and things that might affect your health as opposed to woodworking or smoking'

'I think that's important you have a guy here with a spray gun ... you cant miss that ... you've got the timber at the bottom and the wood dust ... you can't miss that, the metal turnings'

'If you are not careful all your illustrations are going to push the workshop area whereas... offices?'

'Its just targeting the building trade isn't it'

'Yeah and it's not hairdressing'

Generally, focus group participants felt that overall front cover design should highlight COSHH issues and be appropriate for COSHH hazards, be interesting enough to catch the eye and encourage people to pick up the guidance document, and engage with as broad a spread of different industry sectors as possible. Comments supporting this position include:

'The first thing it's got to do is it's got to interest you enough to pick it up to read it'

'I thought it was quite clever actually, my first impression'

'That [the red figure with skeleton showing, and three smaller 'real-world' images] looks informative and official'

'It's important if you are seeing it at a distance...so I think its important and the writing is important'

'On one of the pages could you not have the top five most hazardous substances?'

'COSHH is more understood in industry but not so in non-industry sectors - so something that is not blatantly, not industrial'

'Could the inside cover have picture examples of different situations...hairdressers...lots of different types of businesses and [show how it] applies to a wide range of businesses'

In respect to the overall style options, focus group participants reported the view that the colour red was more appropriate to the topic in hand than the colour blue. Comments supporting this position include:

'Yes the red is quite striking'

'Yes red...red is the colour of danger'

'The eye would go to the red first'

'Red attracts/impacts more'

'It says red – danger'

'The blue I think is nicer but the red if definitely better because so many things are in blue ... if you want it to stand out then red is definitely a lot better'

'The blue does not attract you'

Additional comments of interest gleaned from the focus groups regarding the impact of the new COSHH guidance document include:

'You want it more punchy'

'Just another line there [hook-line after the title]... 'how to keep employees safe''

'The symbols [International Hazard Symbols] ... is there anyway of incorporating them along the bottom...straight away you would understand, recognise'

'It's like a highway code then, on the back it's got the signs [International hazard Symbols]'

'Some boxes - an abbreviation [acronym] table or a list of items of PPE...hammer in that'

4 SUMMARY

4.1 QUANTITATIVE ANALYSIS

The results from the quantitative analysis of the usability word choice questionnaires showed clearly positive perceptions evident in the end-user community regarding the new draft guidance document. Participants demonstrated a degree of consistency across the three focus groups in their choice of words and, further to this, the top four on both stages of the process were the same, albeit in a slightly different order. This provides some re-assurance that the draft guidance document is perceived to be appropriate for the needs of the end-user community.

There was also confirmation that the sample of SMEs and micro-businesses that took part in the focus groups recognised the utility of the guidance document and are willing to engage with it. Whilst this majority view is apparent, it must be noted that five out of 24 individuals responded with the statement 'I don't know if this guide will work'. This demonstrates that there are still some concerns about the new guidance document in terms of its utility. Overall there was a positive outlook in the focus group participants towards the new guidance document, with the clear majority demonstrating a perception of liking the guidance as opposed to disliking it. This quantitative element of the research serves as a useful additional source of information regarding end-user perceptions to supplement the qualitative focus group data analysis.

4.2 QUALITATIVE ANALYSIS

The current situation regarding COSHH control measures as reported by focus group participants indicates the widespread use of PPE as a primary control measure. Every group referred to the 'common sense' approach as one they advocate and implement widely. Whilst there was substantial evidence of PPE in place, there was substantially less mention of the hierarchy of controls approach to COSHH risk management, with relatively few focus group participants indicating that they adopt this more rigorous approach. Some individuals alluded to their consideration of the hierarchy of controls in terms of efforts to implement engineering controls such as LEV systems, rather than just relying on PPE. This was industry-specific (woodworking) and was not an approach widely adopted by others in the focus groups.

Participants reported obtaining useful information from a variety of sources, including trade associations, suppliers, manufacturers, and consultants. This indicates that there is at least a degree of interest in duty holders in terms of their seeking further information to control COSHH risks, and that the information is available if sought. Training and awareness raising was reported to be relevant to the effective management of COSHH risks, with focus group participants alluding to the benefits of both staff and management training in their efforts to minimise COSHH related health issues.

The benefits of employee engagement were widely recognised as relevant to COSHH risk management. Focus group participants indicated that COSHH risk management could only be fully effective if employees buy into the process and accept some of the responsibility for their own health and safety. The challenges of employee engagement were noted, with some participants suggesting that there exists significant variability in employees' willingness to get involved and act responsibly. Participants reported a widely held view that the main approach to ensure employee compliance with the regulations was via the enforcement approach, suggesting that complacency in employees is very hard to overcome. Barriers to full implementation of COSHH risk management were suggested to be wide-ranging, including time pressure, cost of control solutions, and the general pressures of work.

It must be noted that whilst the three focus groups were appropriately facilitated, many participants presented with a less well-developed appreciation of the distinction between the concepts of acceptability, comprehensibility and usability than would have been ideal. Participants regularly responded to the various questions and prompts with views and opinions relating to other areas of the question schedule, most often in relation to the presentation aspects of the draft guidance document. Whilst this is not a problem per se, the fact that presentation was so widely discussed suggests that this is a fundamental aspect of the end-user experience with the draft guidance document. With this in mind, there would appear to be some leverage in fully addressing any presentation issues if the maximum impact of the new draft guidance document is to be achieved.

Focus group participants considered the new draft guidance document to be generally sufficient in terms of its acceptability. The guidance was reported to contain relevant information, relevant to the COSHH related hazards that are commonly found in the various job roles represented at the focus groups. Participants also reported the document to be useful in terms of its signposting to further information. Many participants suggested that the link to the HSE website was useful, and allowed them to find the additional information they required. Some criticism was levelled at the guidance document in terms of its use of examples. The end-user community put forward the view that they would like to see more examples drawn from as wide a range of industries as possible to maximise the relevance of the document, and be as inclusive as possible.

With respect to comprehensibility, participants were generally appreciative of the efforts made to simplify a complex topic, and in most cases found the level of language used in the draft guidance document to be satisfactory and clear, although there were some instances where the language was reported to be overly complex. The document would benefit from a table of acronyms, in order to maintain the readers' engagement with the document. Participants felt that additional pictures would improve their general understanding of the COSHH guidance, and could also serve as a mechanism to maintain engagement with the document. Overall, participants felt that the draft guidance document was fit for purpose, but would benefit from some minor alterations in presentation.

Whilst agreeing that the guidance document was usable such that it addresses the realities and practicalities of the various workplace contexts represented in the focus groups, participants felt that additional examples could be incorporated to ensure the final version is as diverse and inclusive as possible. Participants suggested various potential avenues for additional marketing efforts, for example, television and newspaper advertising campaigns. Leadership style and employee engagement were considered to be significant issues in terms of engendering the most progressive attitudes towards COSHH risk management in employees. Whilst detailed accounts of these strategies are beyond the scope of the COSHH guidance document, there is some mention of employee engagement, and the signposting to the HSE website should provide duty holders with the additional information participants said they wanted.

Participants reported a consistent view across the three focus groups regarding the style and presentation of the new guidance document. The clear preference was for a main image of the human body, coloured red, and having skin on part of the body and lungs visible through the skin. In addition to this main image, three smaller image boxes containing images of real-world activities relevant to COSHH was the preferred choice.

Participants suggested that the real-world images aided their immediate engagement with the document, and indicated that red was the most appropriate colour due to its association with hazards and danger, and therefore its applicability to COSHH as a topic. Participants also

favoured the body image with skin and lungs clearly shown, as this indicated the variety of modes of entry to the body for chemicals.

Both the quantitative and qualitative methodologies suggest that the focus group participants hold generally positive perceptions regarding the draft guidance document in terms of its acceptability, comprehensibility, and usability.

4.3 LIMITATIONS

Qualitative research generates rich and holistic data. However, the findings from the focus groups, whilst comprehensive, present very specific perceptions and attitudes due to the small sample of the available pool of SME's/micro-businesses. Therefore care should be taken with generalising the findings from the focus groups to a wider population, as the sample size was not intended to be representative of the range of views of SMEs and micro-businesses where COSHH is applicable. The findings should be considered within the context of the project, which was to obtain a purposive sample and elicit in-depth views of the end-user community regarding the utility of the new draft guidance document. With this in mind, there emerged a number of useful suggestions and recommendations within this report that if implemented, should serve to make the new draft guidance document better for SME/micro-business duty holders. Further to this, there exists the likelihood of social desirability bias throughout the focus group discussions; with the probability that participants, at least in some degree, provided responses that they felt would satisfy the researchers or the HSE representative present in all focus groups. Nevertheless, the research has highlighted positive and less favourable comments suggesting that participants have expressed a balanced view regarding the COSHH guidance.

5 CONCLUSION

The new COSHH draft guidance document was considered to be broadly acceptable, comprehensible, and usable by the end-user community of SMEs and micro-businesses. Evidence from the three focus groups points to a number of important aspects of the guidance that ensures it addresses the key issues of COSHH risk management, contains an appropriate amount of information couched in an appropriate level of language, and is usable in the practical way intended such that it addresses the realities and practicalities of a wide range of workplace settings. This suggests that the document is both comprehensive and appropriate to the needs of the end-user community.

Whilst the outcomes of this research are generally positive, it must be noted that there are a number of amendments suggested by the target audience that would make the new guidance document even better. These include having additional pictures, additional examples drawn from a wide range of industrial sectors, examples of risk assessment, reducing the number of acronyms, and using a clear and common language throughout.

The clear message regarding the colour and style options is to keep the front cover images immediately recognisable and relevant, and to use the colour red due to its widely accepted associations with hazards. Additional marketing and publicity efforts could help improve the awareness of duty holders regarding their responsibilities in relation to COSHH.

6 RECOMMENDATIONS

Overall, this research was a valuable exercise, enabling a clearer understanding of the needs and views of the SME/micro-business audience in relation to COSHH guidance. The new draft guidance document was generally well received, but would benefit from some simple amendments to improve its impact still further. These include:

- Consider additional pictorial/diagrammatic content
- Consider the relevance of pictures to ensure they are as diverse and inclusive as possible
- Use real-world images rather than abstract ones
- Consider additional examples of workplace contexts, where appropriate, to ensure diversity
- Include fewer acronyms, or include a glossary of acronyms
- Simplify the language in certain areas
- Ensure the HSE website link is clearly visible in a number of places throughout the document
- Design the front cover and style with respect to the findings on this aspect of the research
- Consider supplementary formats, e.g. poster to accompany guidance

7 REFERENCES

Creswell, J.W. (2003). *Research Design: Qualitative, Quantitative, Mixed Methods Approaches*. Sage Publications. London. ISBN: 978-0761924426

HSE (2005). <http://intranet/comms/research/coshhpresentation.ppt> *Audience evaluation of COSHH: A brief guide to the Regulations*.

Patton, M. Q. (1990). *Qualitative Evaluation and Research methods*. Newbury park: Sage Publications Inc. ISBN: 978-0803937796

8 APPENDICES

8.1 APPENDIX 1: USABILITY WORD CHOICE QUESTIONNAIRE

Step 1: Read over the following list of words. Considering the guidance document you have just read, tick those words that best describe your experience with it. You can choose as many words as you wish.

Attractive	Misleading
Boring	New
Businesslike	Off-putting
Clear	Overwhelming
Comprehensive	Patronising
Confusing	Relevant to me
Consistent	Rigid
Contradictory	Simplistic
Easy to understand	Sketchy
Effective	Straightforward
Familiar	Stressful
Friendly	Time wasting
Flexible	Too technical
Good practice	Trusted
Irrelevant	Useful

Step 2: Now look at the words you have ticked. Circle three of these words that you think are most descriptive of the guidance document.

Step 3: Please tick the following boxes next to the statements you agree with. You can tick as many as you wish.

I want to use this guide	I think this guide will work
I would use this guide	I think this guide might work
I could use this guide	I don't know if this guide will work
I can't use this guide	I think this guide can't work
I won't use this guide	I think this guide won't work

Step 4: Please place a mark on the line below representing your answer to the question:

What do you think of the guide?

Like	-----	Dislike
------	-------	---------

8.2 APPENDIX 2: COSHH FOCUS GROUP QUESTION SCHEDULE

General introduction

- Introductions, thanks for attendance, names, positions, organisations, experience, etc.
- Check background details of companies: Size, activities, length of time in business, applicability of COSHH to their organisations, etc.

Stage One – Review the draft guidance document and complete usability questionnaire

- Ensure everyone is familiar with the draft guidance document and the purpose of the focus group exercise. Brief review of the document.
- Complete usability word choice questionnaire in relation to the draft guidance document. Write results up on flipchart.

Questions on the current situation

- Do you use any control measures for chemicals?
- How did you choose them?
- Did you get any advice on suitable control measures? If so, from whom, e.g. supplier, other business?
- Do you check they work? If so, how?

Stage Two – Acceptability, Comprehensibility, and Usability of the draft guidance document.

- **Acceptability**

1. What do you think of the guidance?
Probe:
 - Is it reasonable?
 - Is it relevant (to hazards)?
 - Is it sufficient (to cover hazards and to control risk of exposure)?
 - Is it the right information for your workplace?
2. Are there any gaps in the information?
Probe:
 - What would you add/remove?
 - How would you improve it?
3. Did you learn anything from the guidance document?

- **Comprehensibility**

1. Is there anything in the guidance that is unclear, or difficult to understand?
Probe:
 - Could you follow the guidance?

- What do you think about the amount of information?
 - Is there anything that needs changing?
 - Could the presentation of the information be improved in any way (e.g. text or pictures)?
2. What would you do to make the guidance easier to understand?

- **Usability**

1. Would you be able to use the guidance on your workplace?
Probe:
 - What difficulties would there be in implementing the guidance?
2. If you implement the guidance do you think it will make any difference?
3. Does the guidance address:
 - (a) The specific hazards in your workplace?
 - (b) The realities and practicalities of your workplace?

Stage Three – Style and presentation

What do you think about the style and presentation of the draft guidance document e.g. is it suitable?

For each design:

Immediate response – likes/dislikes. Why?

How would you describe the design? What tone does it set? How does it affect your perceptions of the leaflet?

Response to colours used – likes/dislikes, appropriateness

Use of images – associations and meanings (including any perceived metaphors), appropriateness, ability to engage

Overall – which design is more appealing and engaging? Which is more appropriate to the subject matter and provenance?

Which of the designs is likely to get you to open the leaflet? Why?

Probes: Elaboration and expansion to understand the *why* responses.

Stage Four – Round up and thanks

- Thanks to everyone for contributing time and effort. Is there anything that we haven't covered that you would like to add?
- Do you have any further questions about this research?

Chart 1: Usability Word Choice Questionnaire Step 1 Results

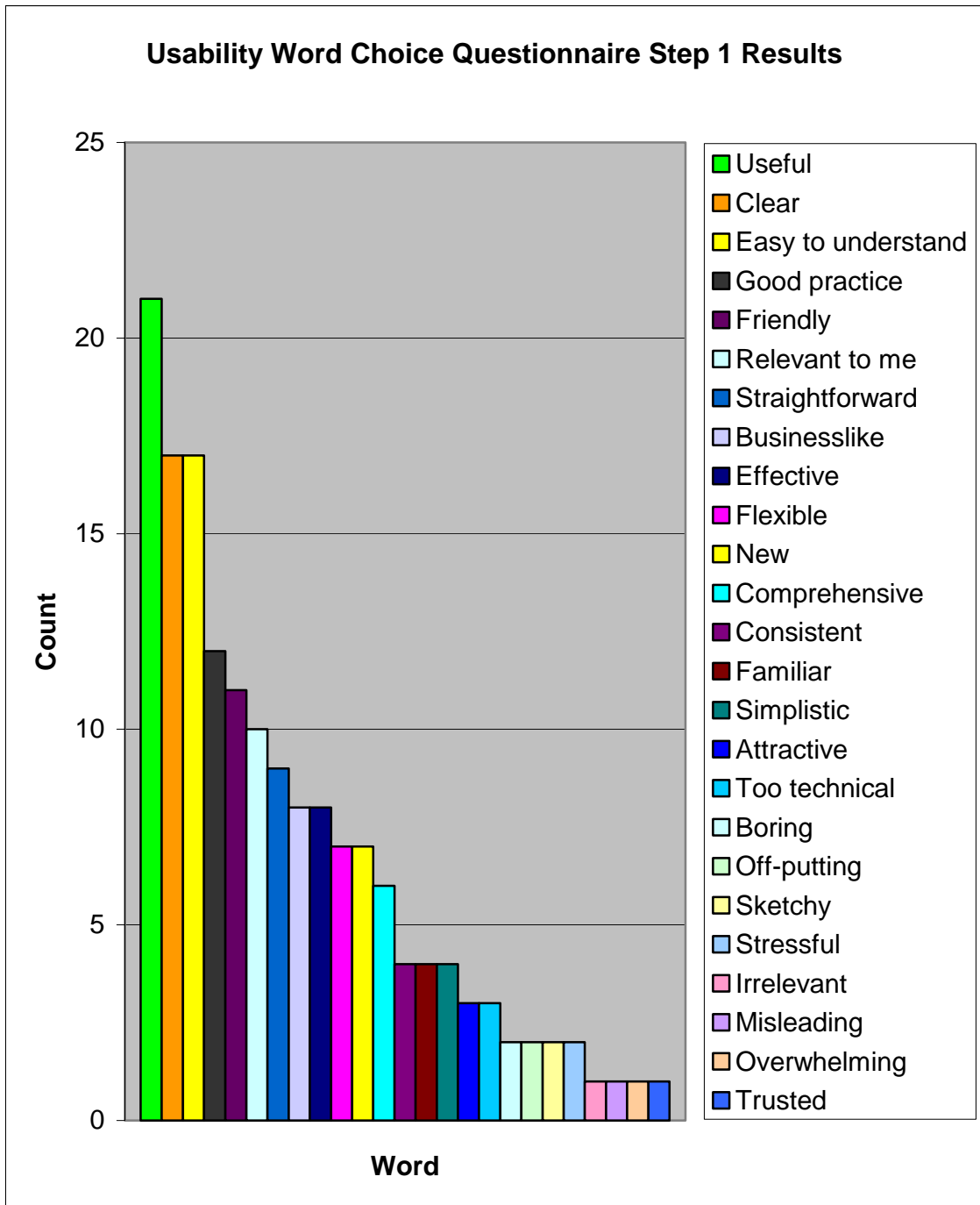


Chart 2: Usability Word Choice Questionnaire Step 2 Results

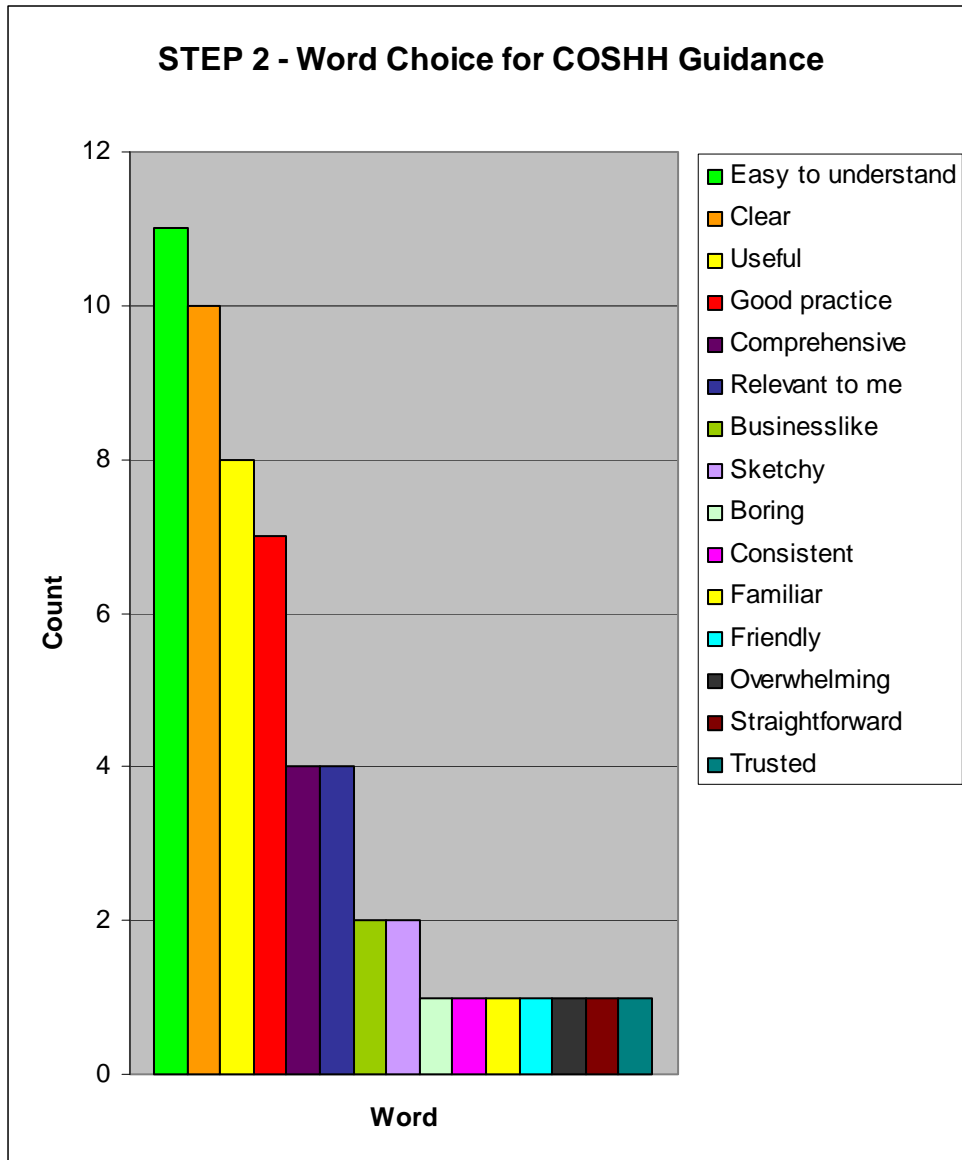


Chart 3: Usability Word Choice Questionnaire Step 3 Results

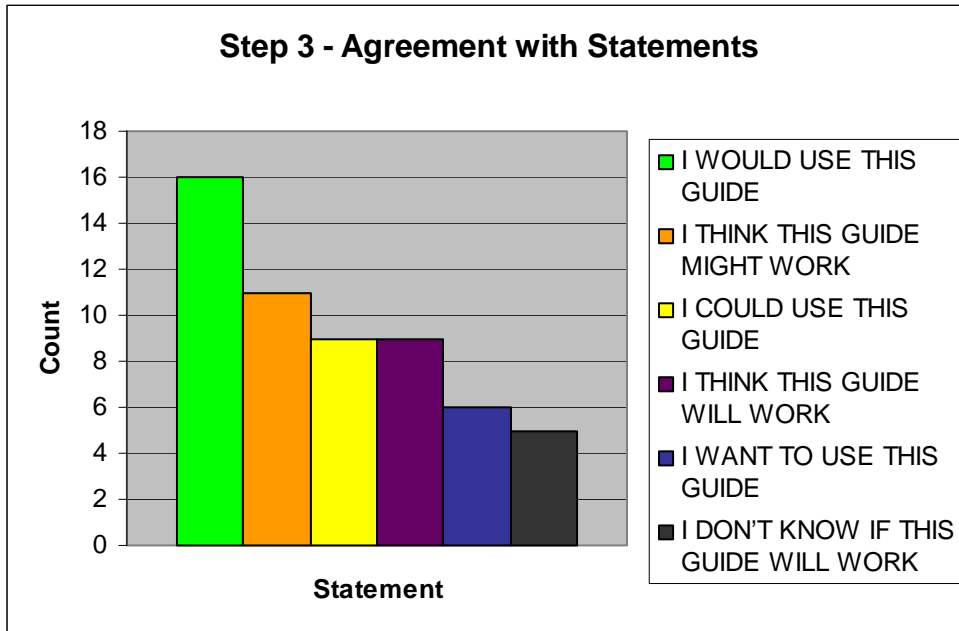
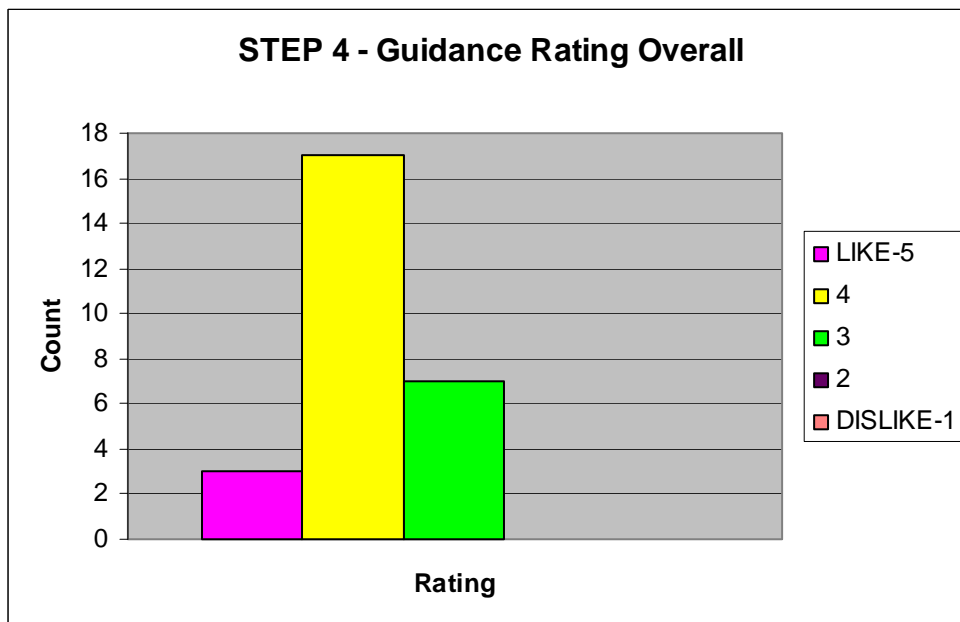


Chart 4: Usability Word Choice Questionnaire Step 4 Results



COSHH and current practice

Improving the usefulness of guidance for dutyholders

Guidance on the Control of Substances Hazardous to Health Regulations (COSHH) has been recently revised (INDG136 Rev4). Before publication, HSE wished to test whether this new format would properly engage and inform the target audience of Small and Medium-sized Enterprises (SME's) and, especially, micro-businesses. The overall aim of this project was, therefore, to gather indicative feedback from this intended user group about the utility and usability of the draft version of the new COSHH guidance, and suggestions for improvements.

The new draft guidance document was considered to be broadly acceptable, comprehensible, and usable by the end-user community of SMEs and micro-businesses. Evidence from the three focus groups points to a number of key areas within the guidance that address the main issues of COSHH risk management. The guidance was described as:

- containing appropriate amounts of information;
- using language of an appropriate level;
- being usable in the practical way intended such that it addresses the realities and practicalities of a wide range of workplace settings.

This suggests that the document is perceived as being both comprehensive and appropriate to the needs of the end-user community.

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