

# CURRENT RESEARCH WITHIN ENVIRONMENTAL HEALTH

## Where do we go from here?



Authors:

Dr. David S. Evans

Mr. Maurice Mulcahy

Ms Deidre Goggin



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By

Department of Environmental Health and the  
Department of Public Health, Health Service Executive  
West

Authors: Dr. David S. Evans  
Mr. Maurice Mulcahy  
Ms. Deidre Goggin

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## EXECUTIVE SUMMARY

The development of Population Health within the HSE has given considerable scope for research to have a significant role in informing policy making and practice 'on the ground'. Within this context, Environmental Health Services are reviewing its involvement in research. They are also developing a Research Strategy. To inform this process, there is a need to obtain baseline information on current research activity and capacity. The aim of the study was to establish the nature and extent of research undertaken within environmental health.

A questionnaire was developed by the study team in conjunction with the Assistant National Director of Environmental Health. An online survey was administered to 583 Environmental Health Officers (EHO's) employed throughout Ireland. Overall 251 EHO's completed the online questionnaire. The key findings can be summarised as follows:

- 18% of EHO's have ever been involved in research as part of their job, with 10% involved in research in the last year.
- On average those respondents that had been involved in research had undertaken 2.25 research projects.
- Principal researcher (29%) and data collection (22%) were the most frequently stated roles for those involved in research.
- On their last research project, the most frequently stated topics for those undertaking research were tobacco (16%), health and safety (13%), and food (13%).
- 43% of respondents who had undertaken research stated that their last research project was undertaken in partnership. The main partners were Universities (41%), the Local authority (29%), and the Technical Colleges (24%).

- The main sources of research funding for those undertaking research was local funding (41%), national funding (24%), and funding from other sources (20%).
- On average, respondents undertaking research spent 257 hours in total on their last research project.
- 94% of those involved in research had to undertake all or most of their current duties whilst working on their last research project.
- 17% of those that had been involved in research state that there had been changes in environmental health work practice as a result of their last research project.
- 82% of respondents were confident in their ability to undertake research.
- The majority of respondents would like further training in a range of listed research skills (60-86%).
- 52% of respondents stated that their Environmental Health Department gave low or very low priority to research, with 18% giving research high or very high priority.
- The main barriers (identified by 86%) to undertaking research were time (59%), resources (35%), and workload (25%) issues.
- 92% of respondents stated that they would be interested in being involved in research within their own department in the future.

In conclusion, this has demonstrated that whilst current involvement is relatively low, there remains significant scope for future development. The following recommendations have been made to facilitate the future development of research within Environmental Health:

1. Environmental Health Services should including a research component in annual service plans.

2. Consideration should be given to making research an explicit component of an Environmental Health Officers role at all levels.
3. A strategic approach to setting research priorities at a national level should be developed.
4. Consideration should be given to develop a national research strategy for environmental health.
5. Environmental Health Departments to further develop their research capacity by utilising the existing research skills within the HSE.
6. Systems to encourage EHO'S to undertake Masters Degrees should be promoted.
7. Departments of Environmental Health in Universities and Regional Technical Colleges should be consulted to establish whether short courses in research methods which are specific to the needs of Environmental Health Officers could be designed.

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# 1. INTRODUCTION

## ***1.1 Introduction***

Over the last ten years, the population health approach has grown in popularity and has become the cornerstone of health policy development in many countries. In Ireland, the 2001 Health Strategy (Department of Health and Children, 2001: 62) recommended that a population health approach be developed at national and local levels. A population health approach is one which aims to improve health status and reduce health inequalities in whole populations and/or subgroups of the population. It includes all measures of health status over the lifespan including; positive dimensions of health, cultures, beliefs, traditions, environments, as well as morbidity and mortality. It focuses on the determinants of health and the interaction between them. Public involvement is a key element (Health Canada, 2006).

With the formation of the Health Service Executive (HSE) in 2005, Population Health was established to promote and protect the health of the entire population, and to influence the determinants of health. Population Health has been subdivided into six main areas:

- Emergency Planning
- Environmental Health
- Health Intelligence
- Health Promotion
- Health Protection
- Strategic Planning and Evaluation

The development of Population Health within the HSE has given considerable scope for research to have a significant role in informing policy making and practice 'on the ground'. Within this context, Environmental Health Services are reviewing its involvement in research. They are also developing a Research

Strategy. To inform this process, there is a need to obtain baseline information on current research activity and capacity. It was within this context that the research was undertaken.

### ***1.2. Aims and Objectives***

The aim of the study was to establish the nature and extent of research undertaken within environmental health. More specifically, the study sought to establish:

- The Priority given to research
- The extent to which research influences environmental health practice
- Current skill levels within environmental health
- Willingness to become involved in environmental health research

## **2. METHODOLOGY**

### ***2.1. Introduction***

To ensure the information collected represented research activity and capacity nationally, and for speed and ease of completion, it was decided to undertake an internet based survey of all Environmental Health Officers (EHO's) throughout Ireland. Prior to administering the survey, a database of all EHO's email addresses had to be created, as there was no up to date list of contact details for EHO's employed in Ireland available at the time of the study.

### ***2.2. Database of Environmental Health Officers***

All Principal Environmental Health Officers (PEHO's) were contacted by email and asked to send a list of their EHO's email addresses. A reminder email was sent one week later. Follow up telephone calls were made to all PEHO's who had not responded one week after the email reminder. The responses received were compiled into a database which was then sent to all PEHO's to verify the contact details for their staff and to add any staff that had been omitted. A total of 583 email addresses were submitted for the study.

### ***1.2. Survey of Environmental Health Officers***

A questionnaire was developed by the study team in conjunction with the Assistant National Director of Environmental Health. The questionnaire aimed to establish:

- Involvement in research
- Research topics
- Impact of research on workload
- Research partners
- Skills and training
- Priority given to research
- Barriers to research
- Future research involvement

Following piloting, all 583 EHO's on the EHO database were emailed the questionnaire and asked to participate in the online confidential survey (using Zoomerang online survey software). One week after the initial email, a reminder email was sent to all those who had not completed the questionnaire (463 EHO's). After a further two weeks a final reminder was sent to any EHO that had not responded (349 EHO's). Overall 251 EHO's completed the online questionnaire. A copy of the questionnaire is given in Appendix 1.

### 3. RESULTS

#### 3.1 Introduction

In this section, the results of the internet survey of EHO's are presented. Of the 583 EHO's that were emailed, 251 completed questionnaires were received. This represents a 43% response rate. The sample size is statistically representative at a 95% confidence level (with a confidence interval of 4.67).

#### 3.2 Profile

The majority of respondents were female (71%). Table 3.1 shows that 61% were less than 35 years of age, with the largest proportion in the 26-34 year age group (46%). The average age was 35.11 years.

**Table 3.1: Age by gender**

Age group	Male		Female		Total	
	No.	%	No.	%	No.	%
18-25	4	5	32	18	36	15
26-34	19	26	96	55	115	46
35-44	17	23	30	17	47	19
45-54	26	35	14	8	40	16
55-64	8	11	3	2	11	4

From table 3.2 it can be seen that responses were received from each HSE region. The largest proportion of respondents were from the west (34%), with the lowest proportion of responses being from Dublin North East (14%).

**Table 3.2: HSE Region Employed**

<b>Region employed</b>	<b>No.</b>	<b>%</b>
<b>West</b> (Limerick, Tipperary North, Clare, Galway, Mayo, Sligo, Roscommon, Leitrim, Donegal)	86	34
<b>South</b> (Kerry, Cork, Waterford, Wexford, Carlow, Kilkenny, Tipperary South)	68	27
<b>Dublin North East</b> (Dublin North, Louth, Meath, Cavan, Monaghan)	36	14
<b>Dublin Mid Leinster</b> (Dublin South, Wicklow, Kildare, Laois, Offaly, Longford, Westmeath)	61	24

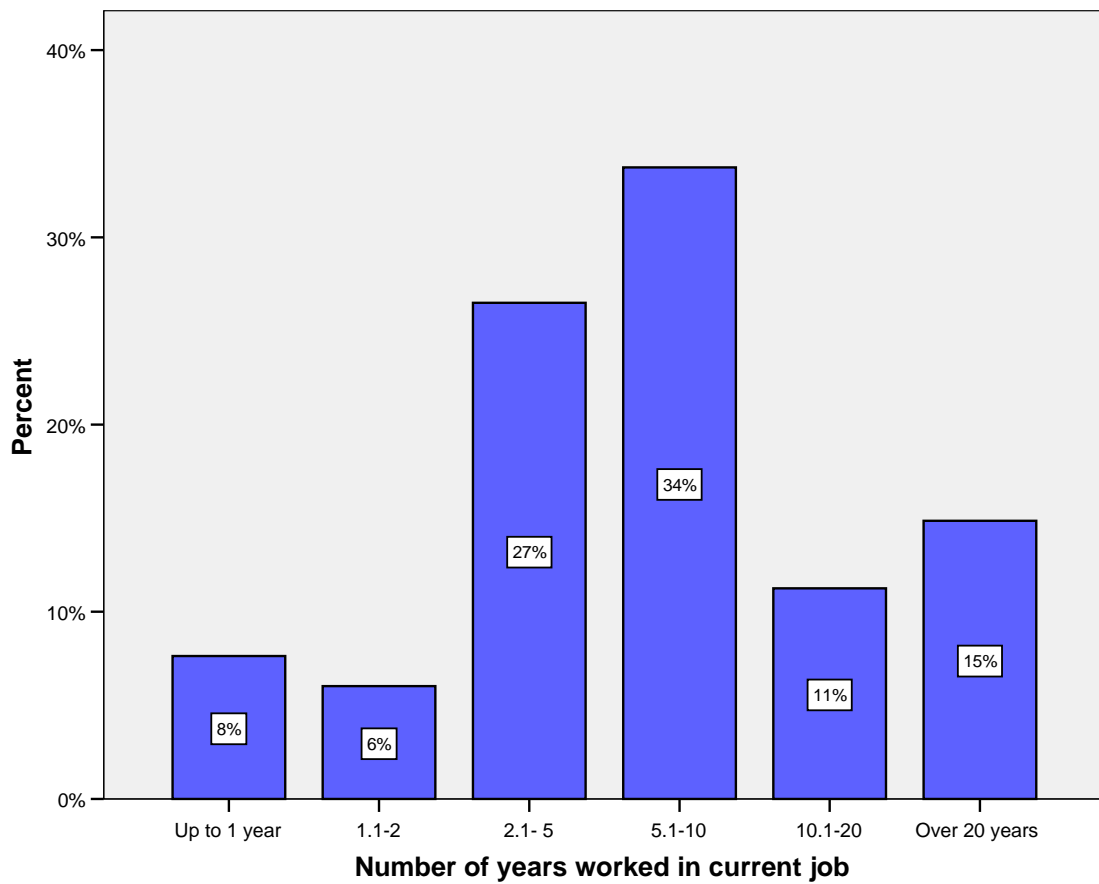
Over two thirds of respondents were EHO's (68%). The highest qualification for 61% was a degree with 22% having a masters degree. Nobody reported having a PhD (table 3.3).

**Table 3.3: Job Type and Highest Qualification**

<b>Job type and highest qualification</b>	<b>No.</b>	<b>%</b>
<b>Job type</b>		
Principal Environmental Health Officer	22	9
Senior Environmental Health Officer	59	24
Environmental Health Officer	170	68
<b>Highest qualification</b>		
Diploma	34	14
Degree	154	61
MA/MSc	56	22
Other	7	3

Figure 3.1 shows that 60% of respondents have worked in their current job for more than five years. On average, respondents have worked in their current job for 9.42 years.

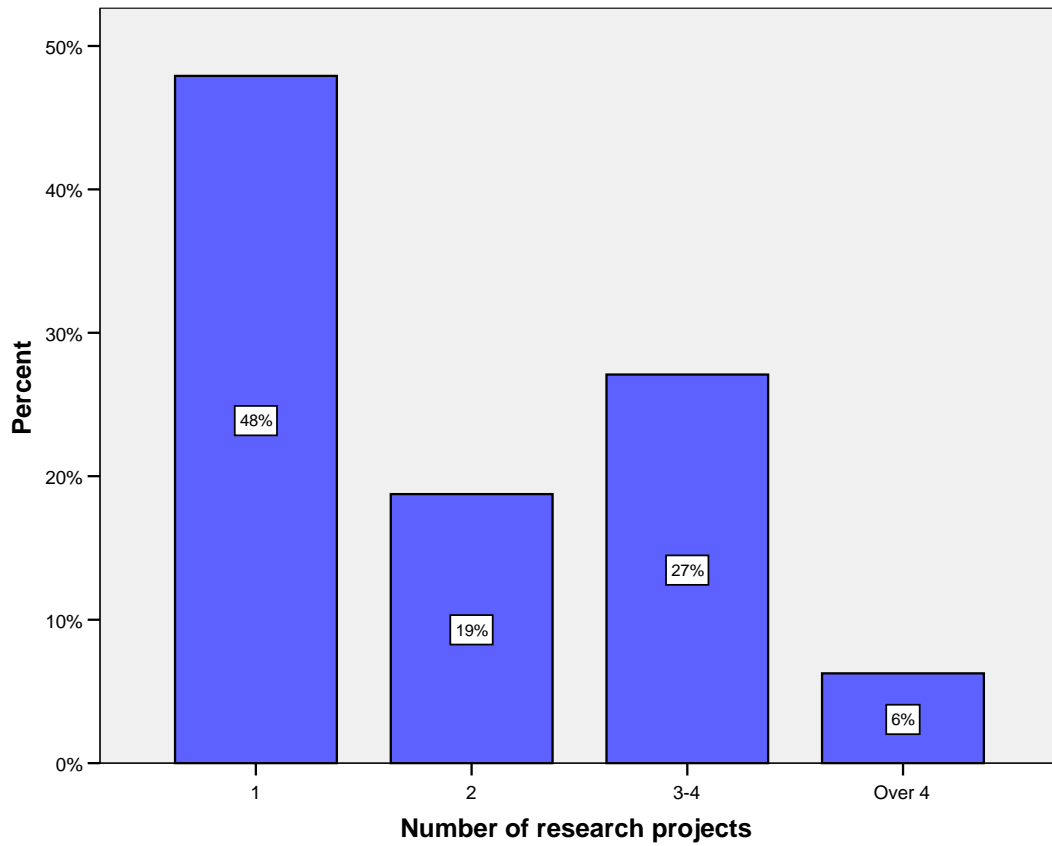
**Figure 3.1: Number of Years Worked in Current Job**



### ***3.3 Involvement in Research***

A total of 18% of respondents stated that they had been involved in a research project as part of their current job. On average these respondents had been involved in 2.25 research projects with 48% being involved in one research project (figure 3.2). Over half (55%) of those that had been involved in a research project as part of their current job had been involved in research in the last year. Overall 10% of respondents had been involved in research in the last year.

**Figure 3.2: Number of Research Projects Ever Involved**



### **3.4 Main Role in Research**

Those that had ever been involved in research were asked their main role in their last research project (table 3.4). A variety of roles were identified with principal researcher (29%) and data collection (22%) being the most frequently stated roles.

**Table 3.4: Main Role in Last Research Project**

Main role	No.	%
Principal researcher	17	29
Research assistant	7	12
Administrative support	1	2
Data collection	13	22
Steering committee	10	17
Other	10	17



### **3.5 Research Topic Areas**

On their last research project, a wide variety of topic areas were covered by those undertaking research. Table 3.5 shows that the most frequently stated topics were tobacco (16%), health and safety (13%), and food (13%). Nobody reported undertaking their last research project on communicable disease.

**Table 3.5: Main Topic Areas of Last Research Project**

<b>Main topic areas</b>	<b>No.</b>	<b>%</b>
Food	6	13
Water	2	4
Air pollution	4	9
Noise	5	11
Tobacco	7	16
Housing	3	7
Communicable disease	0	0
Health and Safety	6	13
Cosmetics	1	2
Decentralisation	1	2
Demographics in the environmental health profession	1	2
Environmental health resources and funding within HSE	1	2
Environmental	1	2
Hygiene	1	2
Occupational health	1	2
Quality of life issues	1	2
Sunbeds/sunbed usage	2	4
Swimming pools	1	2

### **3.6 Research Partners**

A total of 43% of respondents who had undertaken research stated that their last research project had been undertaken in partnership. Table 3.6 shows that the main research partners were universities (41%), the Local Authority (29%), and the Technical Colleges (24%).

**Table 3.6: Main Partners in Last research Project**

Main partners	No.	%
Environmental Health Officers Association	3	18
Office of tobacco Control	1	6
Local Authority	5	29
HSE Public Health Department	3	18
HSE Health Promotion Department	1	6
Other HSE Department	2	12
University	7	41
Technical College	4	24
Cancer Research	1	6
Department of Health and Children	1	6
Food Safety Promotion Board	1	6
Irish Cancer Society	1	6
Irish Heart Foundation	1	6
European Union	3	18
National Hospitals Office/IHSAB	1	6
Other EHO's	1	6
The Centre for Housing Research	1	6

### **3.7 Research Funding**

Table 3.7 shows that the main sources of research funding for those undertaking research was local funding (41%), national funding (24%), and funding from other sources (20%).

**Table 3.7: Where Funding was obtained for Last Research Project**

Funding source	No.	%
Local funding	17	41
National funding	10	24
Other funding	8	20
Don't know	6	15

### **3.8 Workload Issues**

Respondents were asked to estimate the number of hours per week and the number of weeks they spent on their last research project (table 3.8). It can be seen that two thirds (67%) spent up to 8 hours per week on their last research project. The average number of hours spent per week was 7.19 hours. In addition it can be seen that 52% lasted longer than 16 weeks. On average, respondents spent 34.65 weeks working on their last research project.

**Table 3.8: Amount of Hours and Weeks Worked on Last Research Project**

	No.	%
<b>Hours per Week</b>		
1-3	11	26
4-8	17	41
9-15	11	26
Over 15	3	7
<b>Number of weeks</b>		
1-4	6	13
5-8	7	15
9-16	9	20
17-24	7	15
25-52	10	22
Over 52	7	15

Based on the number of hours per week and weeks worked, the total number of hours respondents spent on their last research project was calculated (figure 3.3). It can be seen that half took up to 120 hours, with 34% taking 120-480 hours, and 16% taking over 480 hours. On average 256.89 hours in total were spent by respondents on their last research project.

**Figure 3.3: Estimated Total Number of Hours spent on Last Research project**

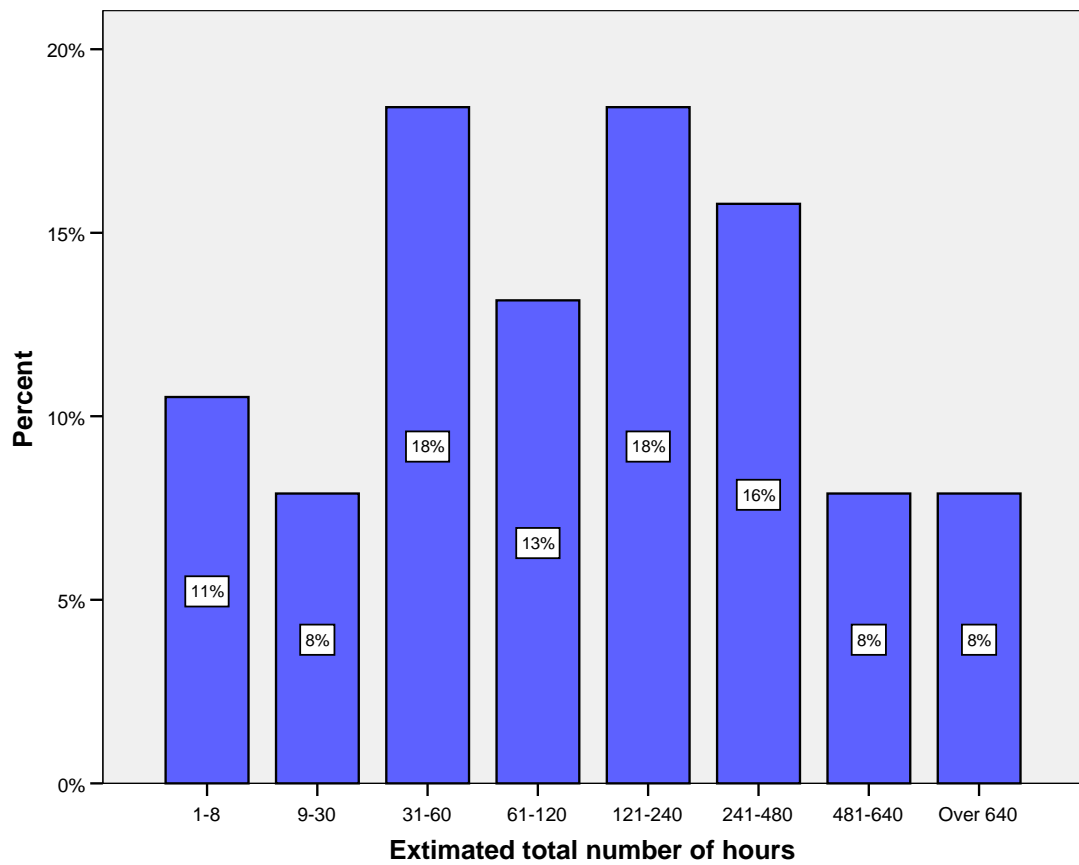
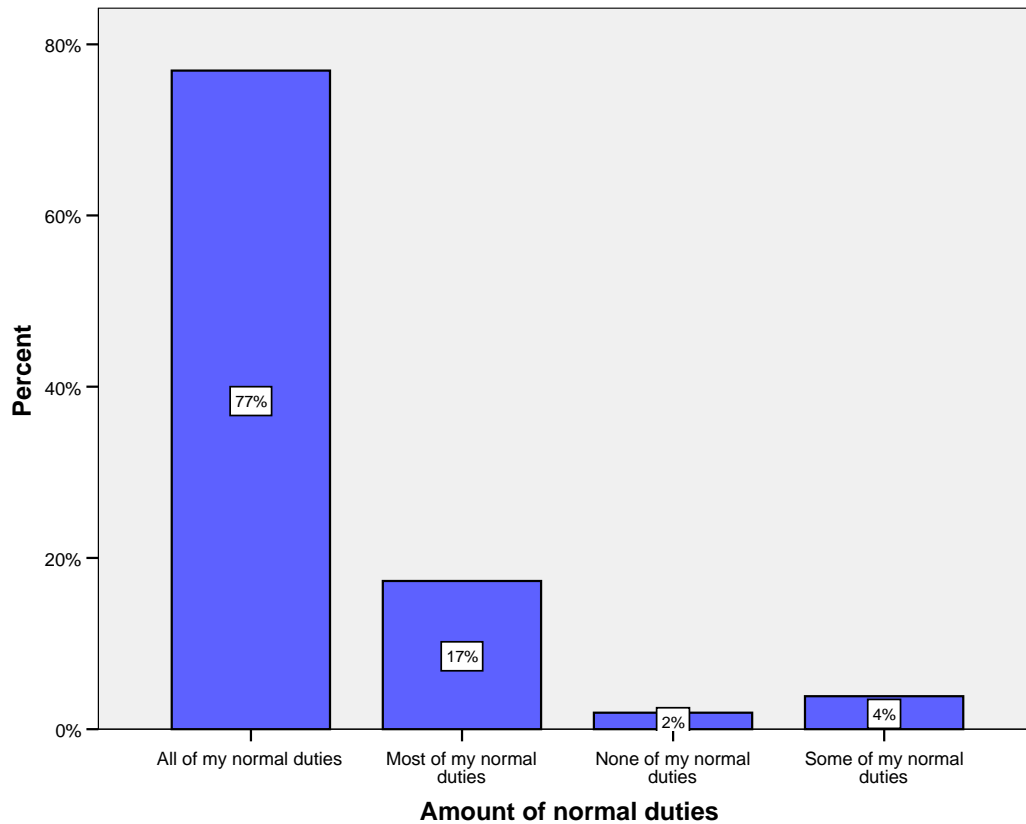


Figure 3.4 shows the amount of normal work duties those involved in research had to undertake whilst working on their last project. It can be seen that 94% had to undertake all or most of their current duties, with three quarters (77%) having to undertake all their current duties.

**Figure 3.4: Amount of Normal Duties Undertaken Whilst Working on Last Research Project**



### **3.9 Changes to Work Practice**

Changes in environmental health work practice as a result of their last research project were reported by 17% of those that had been involved in research, with 44% reporting no changes, and 38% not knowing whether any changes had been made.

### **3.10 Confidence in Ability to Undertake Research**

The majority of respondents (82%) were confident in their ability to undertake research. Those who were not confident were asked to explain (table 3.9). It can be seen that the main reasons for not being confident to undertake research were lack of knowledge/need to develop skills (81%) and time and resources (16%).

**Table 3.9: Reasons why not Confident to Undertake Research**

Reasons why not Confident	No.	%
Lack of knowledge/need to develop skills	30	81
Time and Resources	6	16
Stress	2	5
Confidence	2	5
Support	1	3

### **3.10 Skills and Training**

Respondents were asked to rate their overall skill level for a list of five skills that are used in research (table 3.10). Report writing (75% rating as good or very good, mean = 2.03) and project management (45% rating as good or very good, mean = 2.56) received the most favourable ratings, with statistical analysis (29% rating as good or very good, mean= 2.91) and quantitative (23% rating as good or very good, mean= 2.98) and qualitative (25% rating as good or very good, mean= 2.94) research techniques receiving the least favourable rating.

**Table 3.10: Rating of Research Skills (1 = very good, 5 = very bad)**

Research Skills	Very good or good		Neither		Very bad or bad		Don't know		Mean
	No.	%	No.	%	No.	%	No.	%	
Report writing	186	75	61	25	0	0	1	0	2.03
Statistical analysis	71	29	120	49	44	18	11	4	2.91
Quantitative research techniques	55	23	123	50	48	20	18	7	2.98
Qualitative research techniques	61	25	120	49	45	18	19	8	2.94
Project management	107	45	94	39	24	10	15	6	2.56

Table 3.11 shows that the majority of respondents would like further training in each of the listed research skills (60-86%).

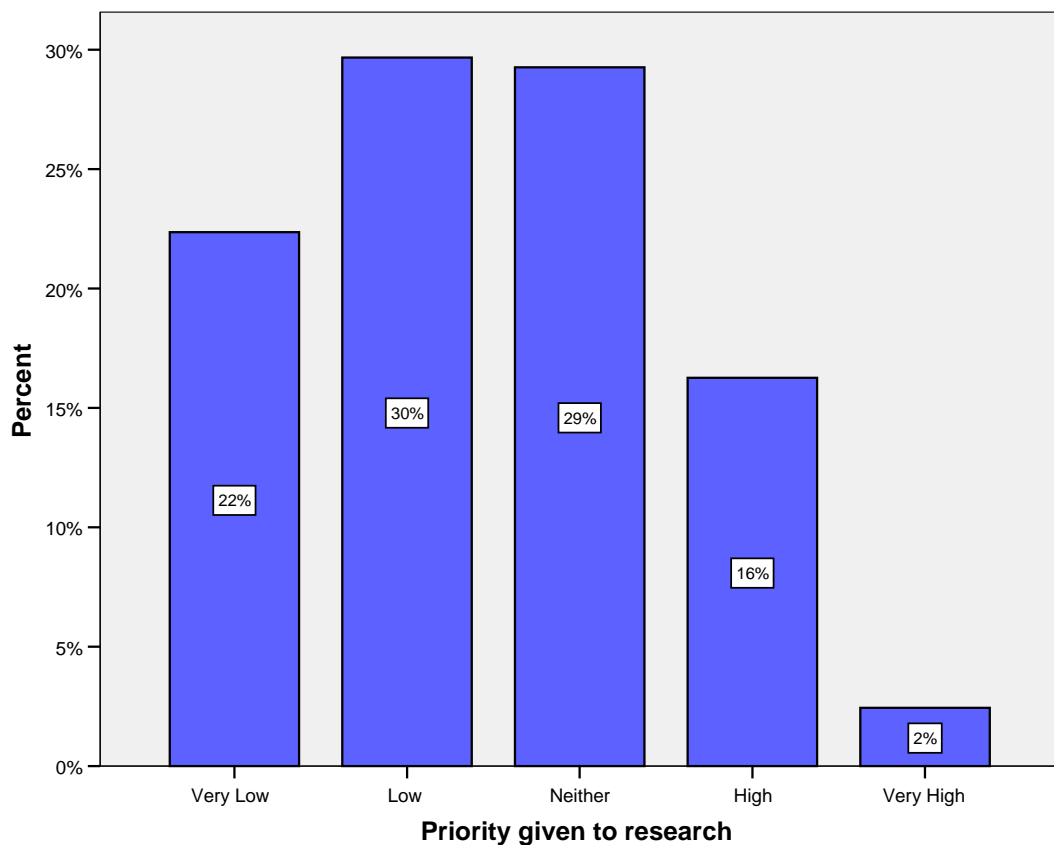
**Table 3.11: Need for Further Training in Research Skills**

Research Skills	Yes		No	
	No.	%	No.	%
Report writing	127	60	84	40
Statistical analysis	179	77	53	23
Quantitative research techniques	192	84	36	16
Qualitative research techniques	191	84	37	16
Project management	192	86	31	14

### 3.11 Priority Given to Research

Figure 3.5 shows that 52% of respondents stated that their Environmental Health Department gave low or very low priority to research, with 18% giving research high or very high priority.

**Figure 3.5: Priority Environmental Health Department Gives to Research**



### 3.12 Barriers to Research

Respondents were asked what the main barriers were to undertaking research within their department. Barriers were identified by 86% of respondents and can be seen in table 3.12. The main barriers were time (59%), resources (35%), and workload (25%) issues.

**Table 3.12: Barriers to Undertaking Research within Environmental Health Department**

<b>Barriers to undertaking research</b>	<b>No.</b>	<b>%</b>
Training	18	8
Time	127	59
Resources	76	35
Links to other Disciplines/Academic Institutions	3	1
Not Departmental Objective	40	19
Support	19	9
Workload	53	25
Lack of IT reporting systems	1	0.5
Effect on meeting targets	33	15

### ***3.13 Future Research Involvement***

The vast majority of respondents (92%) stated that they would be interested in being involved in research within their own department in the future.



## **5. DISCUSSION**

### ***5.1 Introduction***

The study aimed to establish the nature and extent of research undertaken within Environmental Health in Ireland. It involved an online survey of 583 EHO's throughout Ireland. The 43% response rate (n = 251), combined with the fact that responses were obtained from each HSE region and staff category, ensures that the study can provide a meaningful insight into current research within Environmental Health. The key issues arising from the results will now be discussed.

### ***5.2 Involvement in Research***

Currently only 18% of EHO's have ever been involved in research as part of their job, with 10% involved on research in the last year. Although this level of involvement appears relatively low, it must be remembered that research is not an explicit component of their current role. In some ways therefore the fact that 10% have been involved in research in the last year is promising. However, if environmental health departments are going to have a significant role in research in the future, the level of involvement would need to be increased. If this is to happen, departments will have to give greater priority to research as half currently give it low or very low priority. This is a challenge in view of the competing demands placed on the service. Including a research component in annual service plans may help ensure that it is not overlooked. In addition, making research an explicit component of an Environmental Health Officers role at all levels will help ensure ongoing commitment from EHO's. The study has shown a significant level of interest in research, with 92% of EHO's interested in being involved in the future. This demonstrates the potential to expand the current level of involvement in research. There is scope to translate the high level of interest into future research projects that will develop and enhance the quality of future environmental health services.

### **5.3 Research Topics**

In terms of research that has been undertaken within environmental health departments, the results indicate that a wide variety of topics have been covered. This demonstrates the potential scope of future research within environmental health. It also shows the need to develop a strategic approach to setting priorities at a national level. Whilst the variety of research topics should be promoted, priorities do need to be set, to ensure national goals and targets are met for the service. One way of achieving this would be to develop a research strategy for environmental health.

### **5.4 Research Partners**

As environmental health research can encompass a wide variety of research topics, it is in a good position to benefit from working in partnership, whereby a range of different skills can be utilised. In addition, with environmental health being incorporated into population health, it is important that research is undertaken in partnership. Indeed partnership is a core element of the population health approach (Health Canada, 2006). It is therefore promising that 43% of respondents stated that their last research project was undertaken with another organisation. What is disappointing however is the small number of partners within the HSE, and in particular within the Population Health Department (i.e. Public Health Department and Health Promotion Department). There remains considerable scope for Environmental Health Departments to further develop their research capacity by utilising the existing research skills within the HSE.

### **5.5 Skill Levels**

If Environmental Health Departments are to be more proactively involved in research in the future, then it is important that the workforce has the necessary skills and experience for this to be achieved. With an average of nine years employment, staff do have a wealth of experience of environmental health practice. This is a strong 'base' of experience from which to develop research. To translate experience into effective research it is also necessary to possess research skills. Although it is promising that 82% felt confident in their ability to undertake research, the results do

suggest that further training may be required. Whilst research is a key component of undergraduate training (which the vast majority of Environmental Health Officers would have received), it is felt that a Masters degree provides more extensive research training, equipping individuals with a wider range of skills. At the moment, only one in five Environmental Health Officers have a Masters degree. This does suggest that there is scope to improve the level of qualifications of Environmental Health Officers. This is reinforced by the fact that less than a third of respondents rated their skills in statistical analysis, quantitative and qualitative analysis as good or very good. In addition the majority stated that they would like further training in five key research skills. Systems to encourage EHO's to undertake Masters Degrees should be promoted. For those who are not in a position to undertake Masters Course there should be short courses in specific research skills. It is suggested that Departments of Environmental Health in Universities and Regional Technical Colleges are consulted to establish whether short courses in research methods which are specific to the needs of Environmental Health Officers could be designed.

### **5.6 *Workload Issues***

The impact of undertaking research on EHO workload was cited as one of the main barriers to undertaking research. Those that had been involved in research spent approximately one day per week on their last research project. Although this only represents a fifth of their working time, this level of commitment would appear to be significant enough for it to be difficult, if not impossible to also effectively undertake all 'normal' work duties as well. As 94% reported that they had to undertake all or most of their 'normal' work duties during their last research project, it appears the current research activity is leading to an excessive workload commitment for those involved and explains why time was cited as a barrier to research. When working on research projects, EHO's will need some of their 'normal' work duties reallocated. This may have staff and resource implications. As resources have also been highlighted as a barrier to research, additional resources may need to be sought.

### ***5.7 Impact on Work Practice***

The knowledge gained through undertaking research should be utilised by environmental health departments. Research should be seen as a means to an end as opposed to an end in itself. Research studies should lead to tangible outcomes that can be utilised by environmental health departments to improve service delivery. Currently only 17% of respondents that had undertaken research stated that their last research project led to changes in environmental health work practice. There is a need to fully utilise research in the future in terms of ensuring any implications on policy and service delivery are addressed. The potential impact on policy and practice can be built into the design phase of research. In addition, implementation plans could be developed to systematically evaluate the implications of all completed research projects. In this way, environmental health departments will be in a better position to continually improve the quality of services provided.

## 6. CONCLUSIONS AND RECOMMENDATIONS

In conclusion, this study has shown the nature and extent of research undertaken within environmental health. It has demonstrated that whilst current involvement is relatively low, there remains significant scope for future development. The following recommendations have been made to facilitate the future development of research within Environmental Health:

1. Environmental Health Services should including a research component in annual service plans.
2. Consideration should be given to making research an explicit component of an Environmental Health Officers role at all levels.
3. A strategic approach to setting research priorities at a national level should be developed.
4. Consideration should be given to develop a national research strategy for environmental health.
5. Environmental Health Departments to further develop their research capacity by utilising the existing research skills within the HSE.
6. Systems to encourage EHO'S to undertake Masters Degrees should be promoted.
7. Departments of Environmental Health in Universities and Regional Technical Colleges should be consulted to establish whether short courses in research methods which are specific to the needs of Environmental Health Officers could be designed.

8. EHO's undertaking research should be given 'protected time' with some or all 'normal' work duties reallocated.
9. Proposals for future research projects should include the potential impact of the research on policy and practice and an implementation plan.
10. Additional resources should be sought to further develop and expand the research function within Environmental Health Services.

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## **APPENDIX 1**



**ENVIRONMENTAL HEALTH RESEARCH STRATEGY QUESTIONNAIRE**

Environmental Health Services are reviewing its involvement in research. As part of this process, we are finding out the type of research currently undertaken and the research needs of Environmental Health Officers. We would like to ask you a few questions. It will only take a few minutes, and your responses will be **ANONYMOUS AND CONFIDENTIAL**. We would be grateful if you would answer the following questions **ONLINE**. The information you give us will inform future research development and will be presented at the “New Horizons in Environmental Health” conference (28-30 March, Galway Bay Hotel).

**Q1** In which HSE region are you employed?

West	1
South	2
Dublin North East	3
Dublin Mid Leinster	4

**Q2** Job type

Environmental Health Officer	1
Senior Environmental Health Officer	2
Principal Environmental Health Officer	3

**Q3** Are you:

Male	1
Female	2

**Q4** What is your age? \_\_\_\_\_ years

**Q5** How long have you worked in your current job?

Years	Months

**Q6** What is your highest qualification?  
(Please circle one)

Diploma	1
Degree	2
Ma/MSc	3
PhD	4
Other	5

**Q7** Have you ever been involved in a research project as part of your current job?

Yes	1	<b>CONTINUE</b>
No	2	<b>GO TO Q19</b>

**Q8** In approximately how many research projects have you been involved?

Number of research projects

**Q9** Have you been involved any research in the last year?

Yes	1
No	2

What was your main role in your

last research project?  
(Please circle one number)

Principal researcher	1
Research assistant	2
Administrative support	3
Data collection	4
Steering committee	5
Other (specify): _____ _____	6

**Q11** And what was the main topic area of your last research project?  
(Please circle one number)

Food	1
Water	2
Air Pollution	3
Noise	4
Tobacco	5
Housing	6
Communicable disease	7
Health and Safety	8
Other (specify) _____ _____	9

**Q12** Where was funding obtained for your last research project?

Local funding	1
National funding	2
Other funding	3
Don't know	4

**Q13** Approximately how many hours a Week did you spend on your last research project?

<b>Hours per week</b>

**Q14** And how many weeks/months did you spend on your last research project?

<b>Weeks</b>	<b>Months</b>

**Q15** Whilst working on your last research project, how much of your 'normal' work duties did you also have to undertake?

All of my normal duties	1
Most of my normal duties	2
Some of my normal duties	3
None of my normal duties	4

**Q16** Was your last research project undertaken in partnership with any other organisation?

Yes	1	<b>CONTINUE</b>
No	2	<b>GO TO Q 18</b>

		Yes	No
<b>Q17</b> Who were the main partners?	Environmental Health Officers Association	1	2
	Office of Tobacco Control	1	2
	Local Authority	1	2
	HSE Public Health Department	1	2
	HSE Health Promotion Department	1	2
	Other HSE Department (specify)_____	1	2
	University	1	2
	Technical College	1	2
	Food Safety Authority of Ireland	1	2
	Other (specify)_____	1	2

<b>Q18</b> As far as you are aware, did the research lead to any changes in service delivery?	Yes	1
	No	2
	Don't know	3

<b>Q19</b> Do you feel confident in your ability to undertake research?	Yes	1	<b>GO TO Q21</b>
	No	2	<b>CONTINUE</b>

**Q20** If the answer to Question 13 is NO - please explain

\_\_\_\_\_


\_\_\_\_\_

\_\_\_\_\_

<b>Q21</b> What priority does your department give to research?	Very low	1
	Low	2
	Neither	3
	High	4
	Very high	5

**Q22** Please would you rate your overall skill level in terms of the following:  
(1= Very **Good**: 5 = Very **Bad**) :

CODE IN GRID (CIRCLE NUMBER)	Q22						Q23	
	Very Good				Very Bad	Don't know	Yes	No
Report writing	1	2	3	4	5	9		
Statistical analysis	1	2	3	4	5	9		
Quantitative research techniques	1	2	3	4	5	9		
Qualitative research techniques	1	2	3	4	5	9		
Project management	1	2	3	4	5	9		

**Q23** And would you like training in any of the above 

**Q24** Would you be interested in being involved in research within your own department in the future?

Yes	1
No	2

**Q25** What are the main barriers to undertaking research within your department?

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**THANK YOU FOR YOUR ASSISTANCE**