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Organisational roles and responsibilities for health: A pilot survey of businesses, primary and secondary schools and local government

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Abstract:

The idea of organisations taking responsibilities for health has both theoretical and political relevance. However, there is a need to develop a clearer understanding of how organisations conceptualise and respond to such policy initiatives across a range of sectors. Research was commissioned by the Welsh Assembly Government to explore perceptions of responsibility at different levels including individual, organisational and state roles and responsibilities for health improvement amongst the general public and key stakeholders. This report focuses on the results of a pilot survey conducted with 688 representatives across the business, education and local government sectors in Wales.

The overall response rate was 31%, with 14.3% for local authorities, 14.9% for business, 38.8% for secondary schools and 52.0% for primary schools. Follow-up stages appeared to be effective in increasing the response but samples were very small, and the response rate was too low to justify an extensive statistical analysis. Data from the questionnaires are presented as a description of a non-representative group subject to potential measurement error. Results from business respondents suggest that they accept some degree of responsibility for the health of employees and customers in the area of accidents and injuries. Otherwise they take very little action to promote health and most do not want to do any more. Reasons given included a lack of resources, training and information, a lack of need and individuals being responsible for their own health. Results for both primary and secondary schools suggest that schools accept a high degree of responsibility for promoting the health of pupils. All report participation in more than one health-promotion initiative and many say they would like to do more.

The report also includes resource and methodological implications for future survey work of this kind.

Keywords: Corporate social responsibility; surveys; health improvement; workplace health.

An overview of the three studies on the views of the general public and statutory and non statutory organisations can be found at:
www.wales.gov.uk/cmoresearch

Contents

Acknowledgements	
Executive Summary	
1. Introduction	
1.1 The policy context	1
1.2 The theoretical context	1
1.3 The organisational context	2
1.3.1 Local Government	2
1.3.2 Education	3
1.3.3 Business	4
1.4 Methodological issues	6
1.5 The current study	8
2. Methods	9
2.1 Ethical approval	9
2.2 Preliminary review	9
2.3 Sample	9
2.4 Data collection	
2.5 Questionnaire design	10
2.5.1 Rationale for a questionnaire about health promotion	10
2.5.2 General features of questionnaires	
2.6 Analysis	
3. Results	12
3.1 Response rates	12
3.1.1 Stages of the survey and response rates at each stage	13
3.1.2 Reasons for non-response and contact failure	
3.1.3 Data collection costs	
3.2 Action to promote health	
3.3 Facilitators and barriers to health-promotion action	
3.3.1 Not our responsibility	
3.3.2 There's no need	
3.3.3 My organisation could take action to promote health if	20
3.3.3.1 Resources, time and cost	
3.3.3.2 Support for health promotion inside and outside the organisation	
3.4 Participation in health-promotion initiatives	
3.4.1 Welsh Assembly initiatives	
3.4.2 Local health-promotion initiatives	
3.4.3 UK/international health-promotion initiatives	
3.5 Policies for health improvement	
3.6 Impact of Health Challenge Wales	
3.6.1 Customers and pupils	
3.6.2 Employees	
3.7 Views on responsibility for health	
3.7.1 Employees	
3.7.2 Customers	
3.7.3 Pupils	
4. Resources and methodological implications for future surveys	
5. References	
6. Appendices	
Appendix 1: Sample frames, sample selection and data collection	
Appendix 2: Tables showing response rates for business, primary schools, secondary	
schools and local authorities by stages (Numbers and percentages)	
,	

Appendix 3: Estimated costs of data collection: businesses, schools and local	
government	51
Appendix 4: Participation by schools and businesses in Welsh Assembly health-promotion initiatives	55
Appendix 5: Local health promotion initiatives: participation by primary and secondary schools	57
Appendix 6: UK/international health-promotion initiatives: participation by primary and secondary schools	
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The views expressed in this report are those of the authors, not necessarily those of the Welsh Assembly Government.

Executive Summary

Background

Health policy in Wales recognises the need to address both lifestyle factors and the wider determinants of health. For example, *Well Being in Wales* (Welsh Assembly Government 2002) points out that people's health depends upon balancing the economic, social and environmental dimensions of sustainable development. Corporate behaviour can influence individuals' lifestyles as well as the wider determinants of health. The Health Challenge Wales concept challenges individuals *and* organisations to take action to improve health. There is a need to develop a clearer understanding of how organisations conceptualise and respond to such policy initiatives across a range of sectors.

Methods

A pilot survey of health promotion across three sectors, Business, Education and Local Government, was undertaken to provide information for future evaluation and monitoring studies of Health Challenge Wales. A questionnaire was designed to assess health-promotion action undertaken for employees, customers, pupils and the local community. It also assessed perceptions of roles and responsibilities for health and views on health promotion. Questions addressed the six health-promotion areas specified in Health Challenge Wales: smoking; obesity; accidents and injuries; alcohol and other substance misuse; infections (dental decay; vaccine preventable; healthcare-acquired; sexually transmitted); and mental health and well-being. The questionnaire was sent to a sample consisting of: 10 % of primary schools in Wales (n = 157); all secondary schools in Wales (n = 224; all local authorities in Wales (n = 22); 5% of businesses with activity in Wales and employing 50 or more people (n = 285). Therefore the questionnaire was sent to a total of 689 organisations across Wales.

Initial questionnaires were mailed to the whole sample and reminder postcards sent to the whole sample approximately a week later. Replacement questionnaires were posted to 10% of non-respondents and finally, telephone follow-ups conducted with 10% of non-respondents (excluding those receiving replacement questionnaires). The third stage (replacement questionnaires) was not included in the survey of local authorities but all non-respondents were followed up by telephone.

Results

The overall response rate was 31%, with 14.3% for local authorities, 14.9% for business, 38.8% for secondary schools and 52.0% for primary schools. Follow-up stages appeared to be effective in increasing the response but samples were very small. In the telephone follow-up, most data were collected from respondents contacted after only one or two attempts – contacts made after 3-12 attempts were less effective. The main factor underlying non-response appears to be that completion of questionnaires is not given priority, leading to their neglect in favour of more urgent work; or a failure to pass them on to more appropriate respondents. Marginal costs of data collection have been estimated by stage of survey for each group. Telephone follow-up was expensive relative to the other stages, due to labour costs.

The response rate was too low to justify an extensive statistical analysis. Data from the questionnaires are presented as a description of a non-representative group subject to

potential measurement error, with the aim of supplementing data from other parts of the evaluation. Results from business respondents suggest that they accept some degree of responsibility for the health of employees and customers in the area of accidents and injuries. Otherwise they take very little action to promote health and most do not want to do any more. Reasons given included a lack of resources, training and information, a lack of need and individuals being responsible for their own health. Although there was some variation across health area, employees' and customers' health was seen to be primarily the responsibility of the individual; followed by family and friends and then national government.

Results for both primary and secondary schools suggest that schools accept a high degree of responsibility for promoting the health of pupils. All report participation in more than one health-promotion initiative and many say they would like to do more. Activity to improve the health of school staff tends to have a lower priority but some answers suggested an increasing awareness of staff health. Structural constraints such as competing demands of national curriculum; funding and other resources and local factors such as space and support from the LEA affected their capacity and willingness to take action. As for business, although there was variation across health area, schools saw employees' health as primarily the responsibility of the individual, followed by family and friends then central government. For pupils, top priority was most often given to family and friends, followed by schools. Answers from both businesses and schools suggest that the impact of Health Challenge Wales so far has been small.

Resource and methodological implications for future surveys

Recommendations regarding potential measures for future monitoring and evaluation can only be made in conjunction with results from the other two elements of the study, a focus group study of lay perceptions of roles and responsibilities for health and in in-depth interviews with key stakeholders across six sectors. However it is clear that the strength of any future survey of health promotion depends upon further exploratory research to identify, and clarify the attitudes and values of, the people who are asked to respond on behalf of their organisations.

In the short term, it may be useful to contact a sample of respondents to find out what motivated them to return the questionnaire. Since in the current study non-response was the norm, the reasons for response may be more revealing than those given for non-response. Such a sample of respondents could also be asked for their views on modes of contact and the effectiveness of follow-up methods. Evidence from this and Lynn and Sala's (2004) survey suggests that costs of telephone follow-up of non-respondents are high relative to other stages of data collection. Although this needs further investigation, deployment of limited resources on constructing a sample frame and identifying named respondents might be a more cost-effective way of improving response rates. The UK survey with the highest response rates from organisations (Cully et al. 1999) uses face-to-face interviews for data collection. If resources allow, this might be a more efficient method to use with organisations which do not respond well to postal questionnaires.

In the longer term, preparation for a further survey could include more lengthy qualitative research, for example to explore organisations' structures in order to identify appropriate sample units; to validate questions; and in the business sector, to develop contacts which facilitate construction of an adequate sample frame. Using similar questions across such disparate groups gives wide scope for measurement error. Ideally, the validity of the questionnaire would be more extensively tested with individuals from each kind of organisation and from different business sectors.

Experience of the current study suggests that the timetable of any future postal survey of organisations in Wales should be extended to allow for the differences between surveys of households and private individuals; and those involving individuals as spokespersons for organisations.

First, comparison of the response rates in this survey tends to support other evidence (Paxson, Dillman and Tarnai 1995) that every effort should be made to identify a named respondent for a postal questionnaire. This appears to be a substantial task when preparing for a survey of businesses. Second, official registers of businesses in Wales are not available for use as a sample frame. Time is needed for downloading and cleaning a basic dataset from a commercial source and supplementing it with data from elsewhere to reduce coverage error. Finally, experience of this survey supports evidence (Dillman 2000) that response rates can be increased with each successive contact. Therefore it makes sense to allow time and resources for following up non-respondents.

1. Introduction

1.1 The policy context

The question of organisations and health is one that is at the heart of contemporary political and academic debates over roles and responsibilities for a range of social issues, including health. The distinction between public and private sector responsibilities is becoming increasingly blurred and this is matched by shifting conceptualisations of the roles of the individual, organisations and the state, as seen in changing political, public and academic discourses. Examples can be seen in the significant increase in the number of companies engaging in corporate sustainability reporting (KPMG 2002; Jenkins 2004) and in influential social documents from the World Health Organization which suggest that 'business, government, voluntary organisations and individuals have a shared responsibility for maintaining a healthy community' (Leat and Lethlean 2000; cf. Goddard 2004, 106).

In terms of health policy in Wales, there is a clear recognition of the need to address both lifestyle factors and the wider determinants of health. For example, *Well Being in Wales* (Welsh Assembly Government 2002) points out that people's health depends upon balancing the economic, social and environmental dimensions of sustainable development. The Health Challenge Wales concept challenges individuals *and* organisations to take action to improve health, and there seems to be a growing recognition of a role for 'lay people', 'citizens', 'the community' or 'the public' in health improvement, as seen in moves to develop Health Impact Assessment throughout Wales (Elliott and Williams 2004).

1.2 The theoretical context

Work examining health inequalities has highlighted how individual, community, environmental and structural factors all interact to produce diverging experiences of health (Dahlgren and Whitehead 1991). This model suggests that the case for increased social responsibility on the part of organisations has considerable practical relevance with regard to the roles that organisations might play in generating health improving contexts.

Organisations can influence the individual lifestyles, social and community networks and general socioeconomic, cultural and environmental conditions – for example by changes in the workplace, by support for local projects, by waste-disposal practices or use of local suppliers. Organisations also have a direct effect on their employees' living and working conditions through e.g. remuneration (Joseph Rowntree Foundation, 1999); health and safety measures (Health and Safety Executive, 1992); or flexible working. As the King's Fund (2004) states; 'Overall we favour a stronger focus on the ways in which the Government, NHS and other organisations can create the conditions for all individuals to make healthy choices and lead healthy lives' (3)

1.3 The organisational context

Whilst the idea of organisations taking responsibility for health as a general principle appears to have both theoretical and political relevance, there is a need to develop a clearer understanding of how organisations conceptualise and respond to such policy initiatives across a range of sectors. Work in this area has traditionally adopted a 'settings approach' to understanding health improvement (Baric 1992), something which is reflected in such terms as 'healthy schools', 'healthy hospitals', 'healthy workplaces.' The importance of the settings approach was further emphasised by the Jakarta Declaration (World Health Organization 1997), which highlights the evidence for adopting such an approach and outlines the priorities for future health promotion.

Organisations within different sectors may vary in their perceived roles and responsibilities and the issues they face when engaging in health improvement action, but it could be argued that two areas, corporate social responsibility and promoting a healthy workforce, have relevance for all. For example the King's Fund has highlighted how the NHS's deployment of its corporate resources can have a significant impact on health e.g. through employment, purchasing, management of energy, waste and travel and through its role in spatial planning and capital development. This includes:

- Tackling the health risks of poverty, powerlessness and unemployment by helping to create local jobs and training, and by purchasing strategically to strengthen the economies of disadvantaged areas.
- Providing nutritious food to staff, patients and visitors.
- Developing travel plans that encourage healthy exercise and safe transport, and reduce carbon emissions.
- Managing energy, waste and water to minimise harm to the environment, which in turn impacts on health.
- Commissioning buildings that make optimal use of natural heating, light and ventilation and provide favourable conditions for patient recovery and staff well being.

In terms of promoting workplace health, there is potential for action firstly in ensuring that people are protected from workplace hazards and secondly to improve the overall health of the workforce. Examples here could include workplace smoking bans and cessation support (see Parry *et al.* 2000). However, it is important to recognise that organisations in different sectors such as the NHS, Local Government, Education, Voluntary and Community Groups, Business and the Media may face a variety of issues in this area.

1.3.1 Local Government

Local authorities have a statutory duty to promote sustainable development under the Local Authority Act 2000 (Welsh Local Government Association undated). The Assembly's Sustainable Development Action Plan confirmed the commitment of the Welsh Local Government Association to the principles of sustainable development. It also mentioned policy agreements with local authorities setting targets to reduce carbon emissions; improving guidance, evaluation, strategic framework and support for local authorities to integrate principles into practice. For example, The Welsh Procurement Initiative (Welsh Local Government Procurement Support Unit and Welsh Assembly Government 2004) encourages local authorities and other public-sector organisations to consider the 'whole-life cost' of purchasing decisions.

All local authorities in Wales have signed up to the United Nations Agenda 21 strategy (UN Department of Economic and Social Affairs 2004) as a framework for sustainable development (Wales on the Web undated). For example, Neath Port Talbot Council (Neath Port Talbot Online 2004) recently decided to use the Agenda 21 strategy to implement its Community Plan. In addition, the Welsh Assembly Government has given local authorities responsibility for establishing Local Health Alliances with organisations in other sectors. For example, Wrexham County Borough Council (Wrexham County Borough Council 2006) works with organisations in the health, voluntary, business, statutory and education sectors to support a number of local health initiatives. Since 2003, boundaries of local authorities in Wales have been the same as those for local health boards and in each area these two bodies are required to work together to formulate local health, social care and well-being strategies.

In 1998, *Better Health, Better Wales* made it clear that local authorities were expected to promote health in collaboration with health authorities:

'. . .the Government is proposing a new duty of collaboration on both Local Authorities and on health bodies. There must be agreed responsibilities and accountabilities for promoting improvements in health. This means that agencies should agree, and monitor together, how their separate functions should support the health and well-being of individuals and communities.' (Welsh Office 1998)

Better Health, Better Wales also proposed that employers should be encouraged to promote healthy workplaces, and specifically mentioned local government.

Although 'protecting and promoting human health' is part of the Agenda 21 framework adopted by all local authorities in Wales, it may exist alongside, rather than be integrated with, authorities' partnerships with local health boards. Certainly, one local authority seems to link Agenda 21 exclusively to a biodiversity action plan and has a separate Health and Wellbeing Strategy which does not refer to Agenda 21 (Rhondda Cynon Taff County Borough Council undated). Twenty-one of the twenty-two local authorities in Wales hold a Corporate Health Standard Award (Health Promotion Division, Welsh Assembly Government 2005). This suggests that they have a good understanding of promoting health in the workplace.

1.3.2 Education

The Welsh Assembly's advisory panel on Education for Sustainable Development and Global Citizenship has supported the integration of sustainable development in policy affecting the curriculum, teacher training and the functions of schools' governing bodies. The aim is to 'make sustainable development and global citizenship a feature of all aspects of school life' (Welsh Assembly Government 2000 p. 23) including promoting energy efficiency in schools and extending the Welsh Network of Healthy School Schemes. The 'Eco-Schools' scheme (Eco Schools Wales undated) provides a framework for schools in Wales to embed the principles of sustainable development into their activities.

The 'Eco-Schools' initiative names 'Healthy Living' as one of its eight topics. It explains clearly the role of the school in providing an environment which improves the health of individuals and suggests how health promotion can be integrated into existing curriculum areas:

'Sustainability in schools is not just about environmental improvements. Schools play an important role in promoting health, healthier lifestyles and the long-term wellbeing of pupils.

Schools are responsible for providing food, physical activity, and important information on

personal health, social and emotional issues.

Health issues are generally covered through PSE but can also be developed in other curriculum areas including Technology, History, RE, Science and Geography. Assessing and developing the healthiness of a school can also involve pupils in using mathematical and language skills.'

Probably more than 850 schools in Wales (at least 56%) have joined in the Eco-Schools initiative (Recycle Squad undated), suggesting that a strong commitment in this sector to improving health is linked to an awareness of all the dimensions of sustainable development.

Two surveys of primary (Smith *et al.*1994) and secondary (Tudor-Smith *et al.* 1997) schools in Wales suggest there is a well-established commitment in this sector to health promotion. The studies report that overall, schools covered a wide range of health education topics within the curriculum and involved external agencies and professionals to support these activities. Most primary schools considered health education important. However there was a need for more training for primary teachers involved in health education; for more schools to adopt policies on health including written policies on sex education; and for more involvement of external agencies in planning health education. In 1995 some secondary schools were using outdated teaching materials and did not have a clear understanding of the term 'health-promoting school'.

The extent of schools' commitment to the principles of sustainable development within the Eco-Schools framework suggests that improving the health of employees would be an important concern. Even before Eco-Schools started, many Welsh schools were part of the European Network of Health-Promoting Schools of which one criterion is 'To promote staff health and wellbeing'. All maintained schools in Wales are set to become part of the network. However, early evidence from Bowker and Tudor-Smith (2000) suggests that improving the health of staff may not be one of the most important priorities for schools in the network and that the overall emphasis of health promotion work in schools has been on pupils' health.

1.3.3 Business

For businesses, the Assembly's *Sustainable Development Action Plan 2004-2007* (Welsh Assembly Government 2000) seeks to promote business sustainability through influencing public-sector procurement, for example purchasing food; to improve communication with and support to businesses; and to promote ways in which businesses can contribute to sustainability objectives such as resource efficiency. The Business and Environment Action Plan for Wales (Welsh Assembly Government 2003) outlines the roles of the Welsh Assembly Government, the Welsh Development Agency and other advisory and supporting bodies in promoting the prosperity of businesses in Wales and encouraging recycling and other sustainable business practices. The Green Dragon environmental management scheme (Green Dragon 2005) is one way in which businesses in Wales are encouraged to progress towards sustainability and 564 businesses are currently signed up to the scheme. All specifications for Welsh Assembly contracts now require a response to this issue in the form of a statement and/or plans. The Assembly has an environmental policy statement 2005-6. It is signed up to the Green Dragon Scheme and aims to reach level 5 (highest level) of the Green Dragon Environmental Standard by the end of March 2006.

More generally in the business sector, sustainable development has become linked to 'corporate social responsibility' (CSR). Carroll (1999) describes CSR as a 'core construct' which has influenced business thinking over the last fifty years and quotes a definition by Jones (1980):

'Corporate social responsibility is the notion that corporations have an obligation to constituent groups in society other than stockholders and beyond that prescribed by law and union contract. Two facets of this definition are critical. First, the obligation must be voluntarily adopted; behaviour influenced by the coercive forces of law or union contract is not voluntary. Second, the obligation is a broad one, extending beyond the traditional duty to shareholders to other societal groups such as customers, employees, suppliers, and neighboring communities.'

The more recent definition by the European Commission is very similar to this and refers to two dimensions of sustainable development, assuming that businesses are already taking care of the economic dimension by seeking to create wealth:

"a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" (Europa 2005).

More recently, many companies in the UK have adopted the practice of making annual CSR reports (Idowu and Towler 2004) and publishing web pages giving details of their CSR codes of conduct and reasons for adopting them (Bondy, Matten and Moon 2004). CSR may be perceived as the means of balancing the social, environmental and economic elements of sustainable development (Bondy, Matten and Moon 2004; Hammann 2003). The degree to which organisations behave responsibly will affect the balance of these three dimensions and have an impact upon the health of individuals and populations.

There is some evidence that businesses in Wales may not be aware of their impact on the environment. The Environment Agency (Environment Agency 2005) found that only 8% of small or medium enterprises (SMEs) in Wales were aware that their activities could cause harm to the environment – although when prompted, 41% reported carrying out at least one harmful activity. Only 13% were able to name any environmental legislation without prompting. However, most businesses which had taken some action to improve the environment said they had done so because of a general concern rather than because of a need to save money or comply with the law. This suggests that social responsibility does not always go hand in hand with awareness of sustainable development and its relationship to health.

Conversely, demonstrating awareness of sustainable development and a commitment to corporate social responsibility may be less altruistic. Fraser (2005) points to an increase in the number of businesses reporting on their social and environmental impact since the Enron debacle and comments that 'Failure to pay heed to CSR can dramatically impact a company's reputation and even its value.' Fraser mentions the emergence over the last ten years of 'upwards of 50 global and domestic guidelines by which companies can measure their social responsibility efforts' and suggests that the Global Reporting Initiative (Global Reporting Initiative 2002) is the most widely accepted. The Global Reporting Initiative lists the economic, environmental and social performance indicators by which a company's degree of responsibility can be measured. There are core indicators which describe reporting standards for what might be generally regarded as good practice; and additional indicators dealing with reporting of practices which are over and above what may be generally expected. By voluntarily making a public report of their practice, companies are demonstrating awareness of sustainable development. This in itself meets the two criteria for corporate social responsibility of voluntary action and fulfilling a duty to stakeholders (other than shareholders).

Improving health is understood, rather than explicit, in the Global Reporting Initiative guidelines. Employees' health is mentioned twice in the section on social performance indicators in relation to labour practices and decent work under 'Additional Indicators' –

- 'employee benefits beyond those legally mandated (e.g. contributions to health care, disability, maternity, education and retirement)'; and
- 'Evidence of substantial compliance with the ILO [International Labour Organization] Guidelines for Occupational Health Management Systems.'

Customer health is further mentioned under 'Product Responsibility' in the same section, again as Additional Indicators -

- 'Number and type of instances of non-compliance with regulations concerning customer health and safety, including the penalties and fines assessed for these breaches.'
- 'Number of complaints upheld by regulatory or similar official bodies to oversee or regulate the health and safety or products and services.'

The companies using such guidelines to report on their practice are the larger ones and most of these are registered outside Wales. Nevertheless they may have a substantial impact on health in Wales through their local units. Their corporate approach to sustainable development may affect the willingness and capacity of branches or subsidiaries to respond to Health Challenge Wales, Welsh Assembly policies generally, or local authority initiatives.

1.4 Methodological issues

Surveys of organisations require a different approach from surveys of individuals or households. 'The unifying attribute of . . . business¹ surveys is that they are designed to study the organization; individuals within these organizations are surveyed only as spokespersons for the organization.' (Cox and Chinnappa 1995). This attribute leads to some practical difficulties in identifying an appropriate spokesperson. Overcoming these difficulties is important because of their effect on the quality of the data collected and the response rate. If a questionnaire is received by someone who is not best placed to respond, an attempt to answer the questions may result in the respondent's failing to engage with the subject of the questionnaire but providing information deemed to be the minimum required to satisfy the demand for a response - a behaviour for which Krosnik and Alwin (1987) used the term 'satisficing'. Since information about the organisation may be distributed amongst more than one of its employees (Paxson, Dillman and Tarnai 1995), the recipient may decide to pass the questionnaire on to someone else in the organisation, increasing the chances that it may be misplaced or forgotten about. One or more employees may have left or be sick or on holiday; the organisation may have been involved in structural change. All these circumstances may increase the difficulty for individual employees of answering the questions and the likelihood of non-response or inaccurate data.

A low response rate means that data are unrepresentative; the aim of the survey has not been achieved; and resources have been wasted. Staff at the Cardiff Business School and the Welsh Assembly Government suggested that it was unrealistic to expect a response of more than 10% to a postal survey of businesses in Wales. Surveys of schools in Wales appeared to promise better response rates. A 1995 survey of health promotion in Welsh secondary schools (Tudor-Smith *et al.* 1997) had a response rate of 82% after two reminders. A similar survey of primary schools in Wales carried out in 1993 (Smith *et al.* 1994) and using only one reminder, had obtained a lower response rate of 62%.

A literature search was carried out with the aim of finding reviews of methods used to survey organisations and reports of surveys, particularly of commercial enterprises, and identifying the

¹ 'Business' in this context refers to statutory and other organisations as well as commercial enterprises.

methods used by those which had obtained high response rates. Reports of methods are primarily based on experience of conducting official surveys in countries outside the UK (Dillman 2000; Cox *et al.* 1995; Groves *et al.* 2002). A large number of postal surveys of businesses in the UK are carried out by the Office for National Statistics on a regular basis (Smith Pont and Jones 2003). Participation in such official surveys is compulsory – an important incentive for ensuring the questionnaire reaches the right person but one not available to academic researchers. Of surveys where participation is not compulsory, the best response rates in the UK appear to have been obtained by the series of Workplace Employee Relations Surveys (Cully *et al.* 1999). Face-to-face interviews were used to collect data from private- and public-sector organisations, including some from the business and education sectors, and response rates of 80% and more were consistently achieved.

Using a postal questionnaire, Lynn and Sala (2004) obtained a response rate of 72% to their survey of businesses in the UK. Their aim was to check the validity of employees' reports of earnings by contacting a sample of employers. They identified target respondents by asking employees to name individuals in their employing organisations who would have access to the required information. In this survey, replacement questionnaires and telephone calls were used to increase the initial response from 41% to 72% and the researchers report details of methods, response rate and costs at each stage. Lynn and Sala based their methods on evidence from Paxson, Dillman and Tarnai (1995) that following up non-respondents by telephone, and sending questionnaires to named individuals, improves response rates.

Overall, there is evidence that in the UK, face-to-face interviews may be most effective in obtaining a high response rate from organisations. If postal methods are used, response rates are likely to be improved by addressing questionnaires to named individuals who are in the best position to answer the questions; and by telephone follow-up of non-respondents. Paxson, Dillman and Tarnau (1995) say 'In a sense, obtaining a name allows one to turn the contact process for a business survey into an individual-person survey.' Dillman (2000) suggests that for surveys of households and individuals a series of contacts, each with a different appearance or mode, should be planned, suggesting: a preliminary letter, informing the recipient of the impending survey; the questionnaire itself; a reminder postcard (a postcard being a different form of communication from the others); a replacement questionnaire accompanied by a covering letter urging the recipient to respond; and a telephone call.

Identifying the names of appropriate addressees is uncomplicated in a survey of schools and local government. The number of schools and local authorities is known to a high degree of accuracy. Names and addresses of schools and numbers of pupils could be obtained from the Welsh Assembly Government following a signed undertaking that the information would be used only for the purpose of a survey. Names of head teachers are available from the internet. Local authorities have web pages providing contact details for members and officers. Information about businesses was more difficult to find. The Welsh Assembly Government Economic Statistics Division maintains a database of businesses with activity in Wales (National Assembly for Wales (2004) which includes all businesses registered for VAT or PAYE. This appears to be a comprehensive register of businesses in Wales but the information is confidential and only summary data are available publicly. The Interdepartmental Business Register (Office for National Statistics 2002), a register of all businesses in the UK, is also confidential. The largest publicly available databases of businesses are compiled from information registered by businesses at Companies House - such as those available from Dun and Bradstreet (D&B 2000-2006) and Kompass Reed Information (Kompass 2005). Lists of the required information can be bought from these companies. Cardiff University already subscribes to the FAME database of information on UK and Irish companies (Bureau van Dijk Electronic Publishing 2005). Although the list is updated daily, information about changes in company names and addresses, numbers of employees, directors and other details is not always passed on quickly

so some information can be inaccurate. This is not a disadvantage peculiar to commercial databases – frequent changes in businesses mean that maintenance of official business registers is difficult even when businesses are required by law to supply information (Archer 1995).

Preliminary enquiries were made about obtaining contact details of businesses from the Welsh Development Agency. This looked promising but would have involved compiling a sample frame sector by sector from many different sources. This was not practical within the resources of the current study. The best option seemed to be FAME. This is generally used for surveys by Cardiff Business School and there appeared to be no advantage in using any of the other commercial databases. Although FAME supplies names of directors and managers of most businesses, these were mainly concerned with operations and financial management. 'Contact' names were supplied for some companies, but as this database was mainly concerned with financial information, there was no way of knowing whether these individuals would be the most appropriate to approach for a survey of health promotion. Other researchers appeared to have had access to information which made it easier for them to identify appropriate addressees and there were no reports of how this had been done in the absence of any special source of information. The only guidance on how to go about this important task comes from Paxson, Dillman and Tarnau (1995), who suggest phoning each business to obtain the name of the person who should receive the questionnaire.

1.5 The current study

In summary, there was some evidence that obtaining a high response rate from businesses would be much more challenging than from schools. The proposed sample of local authorities was small (n = 22) and any problems of non-response did not appear to be on the same scale as in the other sectors. The most effective strategies for improving the response rate appeared to be use of face-to-face interviews or if postal methods were used, addressing questionnaires to a named individual and making many contacts including a telephone follow-up of non-respondents. One of the main challenges for the current study, therefore, was to identify named respondents who could supply information about the social, rather than the economic, activities of businesses.

This pilot study therefore had the following aims

- to identify variation in response rates across groups and possible explanations for such variation
- to evaluate responses to quantitative measures assessing responsibility for health
- to identify potential response categories to open ended questions
- to make methodological recommendations for future surveys of organisations examining responsibility for health
- to identify the resource implications for future surveys of organisations examining responsibility for health

2. Methods

Appendix 1 gives details of sample frames and selection; and the conduct of each stage of the data collection.

2.1 Ethical approval

The School of Social Sciences Ethics Committee at Cardiff University approved the study. Information sheets and covering letters accompanying the questionnaires invited recipients to raise any concerns with, or seek further information from, project staff or the sponsor. Returning the questionnaire was deemed to signify informed consent to participate. Sample frames containing contact details were stored electronically in a database to which only project staff had access. Each person on the list was given a unique number which was used to identify the questionnaire on return so that the name could be removed from the list for follow-up. Data from questionnaires were stored separately from these numbers so that there was no direct link to the sample frame. All Directors of Education in Wales gave permission for schools in their areas to be included.

2.2 Preliminary review

No plans had been made for extensive pre-testing of the questionnaires because the survey itself was a pilot. However, two primary-school head teachers looked at the questionnaire for primary schools and the business questionnaire was reviewed by two business professionals. A secondary-school teacher provided verbal comments on the secondary-school questionnaire. Revisions were made in the light of their suggestions and comments.

2.3 Sample

The purpose of the survey was to pilot a postal questionnaire and establish response rates from a sample of schools, businesses and local authorities in Wales, as shown in Table 1:

Table 1: Proposed sample of organisations in Wales

Organisation	n	% of total in Wales
Primary schools	157	10
Secondary schools	224	100
Local authorities	22	100
Businesses with activity in Wales and employing 50 or more people	285	5
Total number in sample	689	

A random sample of businesses, stratified by size and National Public Health Service (NPHS) area was selected from the FAME database (Bureau van Dijk 2005). This sample frame included all trading addresses of companies with activity in Wales. Questionnaires were sent to a total of 282 businesses.

The sample of primary schools was also stratified by size and NPHS area using a list provided by the Welsh Assembly Government. All secondary schools were included in the survey. The intention had been to include all 22 local authorities in Wales in the sample. However, one council leader had participated in the interview stage of the evaluation and did not wish to be included in the survey: therefore the sample was reduced to 21.

2.4 Data collection

There were four stages of the survey for schools and businesses:

- 1. Initial mailing of questionnaires to the whole sample
- 2. Reminder postcards sent to the whole sample approximately a week after the initial mailing
- 3. Replacement questionnaires posted to 10% of non-respondents
- 4. Telephone follow-up of 10% of non-respondents (excluding those receiving replacement questionnaires) to ascertain reasons for non-response

The third stage (replacement questionnaires) was not included in the survey of local authorities but all non-respondents were followed up by telephone. Letters and postcards were written in both English and Welsh.

2.5 Questionnaire design

2.5.1 Rationale for a questionnaire about health promotion

Health promotion is clearly included in Agenda 21 (United Nations 1992) as an essential means of achieving sustainable development. Efforts to promote the health of individuals and populations have the potential to identify more readily the social, environmental and economic factors which can improve or harm health. Health promotion can be seen as a tool for drawing together the three dimensions of sustainable development; thus helping to manage this 'wicked issue' (Williams and Thomas 2004) and to steer collaborative work.

A questionnaire asking organisations what they are doing to promote health, how they have responded to Health Challenge Wales and what they perceive to be helping or hindering their efforts has the potential to provide information about

- Organisations' level of awareness of their impact on health
- How much responsibility they take for improving health
- To what extent they have integrated sustainable development into their activities

Schools in Wales have a strong background of health-promotion work and both schools and local authorities have clear statutory and professional duties to promote health. Policy links between health promotion and sustainable development are clear. There may be a tendency for schools and local authorities to consider they are already doing as much as they can to promote health. However there may be important variations in the way in which they interpret their responsibilities. Those who respond to Health Challenge Wales may provide insights into how health-promotion action can be developed in the context of sustainable development.

The business sector generally does not seem to have paid any particular attention to health promotion as a key component of sustainable development: the Global Reporting Initiative

(Global Reporting Initiative 2002) mentions health-care benefits for employees, and the health and safety of employees and customers. In addition, many businesses could meet the criteria for corporate social responsibility merely by reporting openly on their business practice. However, there is still room for optimism that businesses may have responded to Health Challenge Wales by taking voluntary action, following recent concerns regarding corporate social responsibility.

2.5.2 General features of questionnaires

The questionnaires were designed to collect data on the same basic topics:

- Organisations' involvement in health promotion of employees and the population served, in relation to six priority health-improvement areas
- The impact of Health Challenge Wales
- Perceptions of how responsibility for health is shared between individuals, organisations and the state.

Questionnaires were modified in various ways so that they made sense to respondents in primary schools, secondary schools, businesses and local authorities but the design was kept as uniform as possible with the aim of collecting data for comparison across all four groups. The questionnaires for businesses and schools were designed in two parts:

- Section A 'Creating a healthy school' (schools) or 'Creating a healthy workplace' (businesses).
- Section B 'General questions about health promotion'

The questionnaire for local authorities was in three parts because it is a statutory obligation of local authorities to promote the health of the communities they serve:

- Section A, 'Creating a healthy workplace'.
- Section B 'Creating a healthy community'
- Section C 'General questions about health promotion'

2.6 Analysis

The low response rate meant that results would not have statistical significance. Therefore questionnaire responses were described with the aim of supplementing evidence from interviews and focus groups and highlighting methodological issues. The main objectives of the analysis were:

- To describe response rates of different groups of respondents at different stages of the survey
- To describe responses to questions on responsibility for health and involvement in health-promotion action
- To categorise open-ended responses to questions about health-promotion action and the influence of Health Challenge Wales.

SPSS Data Entry 4 was used for data entry and descriptive statistics were obtained using SPSS 12.00. A random sample of 5% of questionnaires was selected for validation of data entry and no errors were detected.

3. Results

3.1 Response rates

In this section, the response rates from different sectors have been presented; the main reasons for non-response; and the marginal costs of following up a sample of non-respondents. This leads to several observations which should be regarded with caution because of the small numbers involved.

Follow-up with replacement questionnaires and by telephone appear to have been equally effective in increasing response from the business sector. The telephone stage increased the number of questionnaires completed even though this was not the main object of the follow-up. Effectiveness of the two follow-up methods may be different in schools, where the telephone stage was slightly less effective than sending replacement questionnaires.

During the telephone follow-up, the large number of offers to complete a replacement questionnaire was unexpected and led to a degree of 'mission creep'. With hindsight, the value of this stage might have been increased if such offers had been politely refused and followed by more probing questions about the reasons why the questionnaire had not reached the appropriate respondent. Telephone follow-up of future surveys is likely to be more useful if it is more narrowly focused either on encouraging non-respondents to provide the data originally requested or on obtaining more information about why the questionnaire was not completed in response to previous contacts.

The relatively high cost of the telephone follow-up is partly accounted for by the opportunistic nature of data collection at this stage and employment of a researcher to carry out the work. Even so, training expenses would have added to the cost of employing a clerical assistant. Sample unit costs could be reduced by increasing the size of the follow-up sample and possibly by setting a limit for the number of contact attempts, since more data was collected from people contacted after one or two calls than from those contacted after three or more attempts. However it is difficult to know without further investigation whether this has happened by chance or is a feature of more representative samples.

The reason most often given for non-response was not having seen the questionnaire. This appears to be related to three main factors – the structure of the school or business; a low priority given to questionnaires; and changes affecting continuity in the organisation. Not having seen the questionnaire may mean either that the questionnaire has not reached the addressee or that the addressee has received it but does not remember it. Naming the addressee is thought to increase the chance that questionnaires will be passed on if the post is opened by secretaries or other 'gatekeepers'. In this study insufficient time may have been allowed for identifying named addressees in the business sector. However, nearly all questionnaires to schools; and all to local authorities, were addressed to named individuals. The difference between secondary and primary school response rates may be partly because in primary schools the head teacher is more likely to take responsibility for completing the questionnaire than to pass it on to another member of staff. Even so, the response from primary school head teachers, although the largest in this survey, was not enough to produce a representative sample.

The reason that primary head teachers had not seen the questionnaire was most often related to remarks indicating that it had a low priority. The main challenge in this group appears to be in overcoming the perception that the questionnaire is not important. Getting the questionnaire

into the hands of target respondents may be a necessary, but not a sufficient condition, of securing a satisfactory response. It also seems important to find out more about what motivates people to respond and the differences between those who respond and those who do not.

3.1.1 Stages of the survey and response rates at each stage

The total response rate from all survey groups was 31%. The response rate from primary schools was disappointing compared with the response of 62% to a health promotion survey of primary schools in Wales carried out in 1993 (Smith *et al.* 1994) which used only one reminder. The response from secondary schools falls far short of the 82% rate obtained in a 1995 survey of health promotion in Welsh secondary schools (Tudor-Smith *et al.* 1997) after two reminders. The response rate from local authorities was the lowest for all sectors (though only slightly less than the response from the business sector). Table 2 summarises the response following each stage, for all groups.

Table 2: Summary of response rates by stage of survey: businesses, primary schools, secondary schools and local government

Sector									To	tal			
	Number in sample (100%)	1 st – 2 nd – initial reminder mailing postcards				reminder replacement telephone		reminder replacement teleph postcards questionnaires follow		reminder			
		n	%	n	%	n	%	n	%	n	%		
Business	282	11	3.9	21	7.4	5	1.8	5	1.8	42	14.9		
Primary schools	158	-	-	75	47.5	5	3.3	2	1.3	82	52.0		
Secondary schools	224	-	-	82	36.6	3	1.3	2	0.9	87	38.8		
Local authorities	21	1	4.8	1	4.8	-	-	1	4.8	3	14.3		
Total	685	12	1.7	179	26.1	13	1.9	10	1.5	214	31.2		

The response rate obtained from the business sector was a little more than expected - staff at Cardiff University Business School and the Welsh Assembly had suggested that 10% would be the maximum response rate. There appear to be no reports of academic surveys of medium and large businesses in Wales for comparison. However, the methods used for following up the sample are similar to those used by Lynn and Sala (2004) who have reported details of the response rates for each stage of their survey of employers in the UK carried out to verify details of employees' remuneration. Both surveys are alike in using three postal contacts and one telephone follow-up. There was a difference in the follow-up methods because Lynn and Sala followed up all non-responding businesses; and in the current study, the last two stages involved only a 10% sample of non-respondents at each stage.

In Tables A14.1 to A14.4 (Appendix 2) the response rates for each group are presented as far as possible in the same way as in Lynn and Sala's table, to facilitate comparison. In these tables the first (initial posting) and second (reminder postcard) stages are both described under the heading of '1st stage' because they involved the whole sample. The replacement questionnaire stage is then described as Stage 2 and the telephone follow-up as Stage 3.

The response rates obtained for each stage of the business survey were compared with Lynn and Sala's response rates as shown in Table 3. In Lynn and Sala's survey there were two weeks, and in the Health Challenge Wales survey only one week, between the initial posting and the reminder mailing. This may account for the difference in the response rates after these two stages. In the next stage, response rates as a percentage of the follow-up samples are fairly similar – the interval between reminder mailings and posting replacement questionnaires was about a month in each survey. There is a large difference in the response to the telephone stages, even when expressed as percentages of the follow-up samples. This may be because the purpose of the Health Challenge Wales telephone stage was primarily to ascertain reasons for non-response, whereas in Lynn and Sala's study the purpose was to complete questionnaires. Although there are many differences between the two surveys and the response rates are not obviously similar, there is some evidence from both that the overall response from businesses can be improved with each successive contact.

Table 3: Percentage of total response rate resulting from each stage of 2 business surveys

Stages of survey		Sala (2004): es completed	business s	lenge Wales urvey 2005: res returned
	% of total sample (n = 253)	% of follow-up sample	% of total sample (n = 282)	% of follow-up sample
Initial posting	23.7	-	3.9	-
Reminder mailing	17.4	-	7.4	-
Replacement questionnaire	9.9	16.8	1.8	20.0
Telephone follow-up	20.6 57.1		1.8	21.7
Total	71.6		14.9	

3.1.2 Reasons for non-response and contact failure

Reasons for non-response were not ascertained until the telephone stage, and were obtained from only a small number of all non-respondents. The reason most often given was that respondents could not recall seeing the questionnaire. Three main factors associated with this reason were identified: the organisational structure of the company (e.g. a requirement to send questionnaires to head office; questionnaire not being passed on to respondent); changes affecting continuity in the organisation (e.g. manager left; change of address); and a low priority given to responding to questionnaires (e.g. too much paperwork; too many surveys; policy not to respond). Difficulty in completing the questionnaire was also reported by a small minority of non-respondent secondary schools and local authorities.

Two members of local-authority staff contacted the researcher 5-6 weeks after the initial mailing saying that the questionnaire had only just reached them. This supports other evidence regarding the importance of getting the questionnaire to the appropriate person first time. Due to the very low response from this sector, results have not been included in Section 3.2. Failure to contact appropriate individuals in secondary schools and local authorities was most often associated with organisation structure (e.g. contact with secretary or other clerical staff who did not know whereabouts of contact or who else would be dealing with it). Table 4 shows the number of times the main factors were mentioned as a reason for non-response or appeared to be related to failure in contacting the appropriate person.

Table 4: Main factors associated with non response/contact failure: Findings from telephone follow-up of a survey of businesses, primary schools, secondary schools and local authorities

Factor	Number of t	imes arising	in relation to no	Number of times arising in relation to contact failure*		Total	
	Businesses (n = 23)	Primary schools (n = 8)	Secondary schools (n = 12)	Local authorities (n = 19)	Secondary schools (n = 3)	Local authorities (n = 15)	
Not specific	9	2	5	2	-	-	18
Organisation structure	7	1	3	4	3	10	28
Changes affecting continuity	3	2	0	1	0	4	10
Low priority of questionnaires	4	4	3	2	-	-	13
Other	2	2	1	2	0	-	7
Total	25	11	12	11	3	14	76

^{*} More than one factor was identified during some contacts/attempts so numbers are not equal to sample totals.

The process of contacting most of the target respondents in businesses and primary schools was straightforward. However, contacting the appropriate person in secondary schools and local authorities was much more difficult, as demonstrated by the mean number of calls per contact (Table 5). The maximum number of calls made to any individual was 12 (to secondary schools). Table 5 also shows how many calls resulted in the collection of more data – either by completion of the questionnaire or the follow-up questions.

Table 5: Summary results of telephone follow-up of businesses, primary schools, secondary schools and local authorities

Sector	Number in sample	Total calls	Successful contacts	Mean number of calls per contact	Number of calls resulting in more data
Business	23	50	23	2.2	8
Primary schools	8	19	19	3.2	5
Secondary schools	12	51	9	5.7	8
Local authorities	19	40	4	10	4
Total	62	160	55	2.9	25

In all groups, little data resulted from contacts made after more than two calls. This suggests that large numbers of attempts per individual may not be cost effective and that resources could instead be used for further follow-up of those who offer to complete replacement questionnaires. (But the sample size is small and this would require further investigation.) Table 6 gives details of the number of occasions on which data was collected after contact was made following 1-12 calls.

Table 6: Number of occasions on which data was collected, by number of contact attempts: Businesses, schools and local authorities

Number of contact attempts		Number of occasions on which data was collected										
	Business (Total calls = 50)	Primary schools (Total calls = 19)	Secondary schools (Total calls = 51)	Local authorities (Total calls = 40)	Total (Total calls = 160)							
1	4	2	3	1	10							
2	3	3	0	2	8							
3	0	0	1	0	1							
4	0	0	1	1	2							
5	0	0	0	-	0							
6	0	0	0	-	0							
7	1	-	1	-	2							
8	-	-	0	-	0							
9	-	-	0	-	0							
10	-	-	0	-	0							
11	-	-	0	-	0							
12	-	-	0	-	0							
Total	8	5	6	4	23							

3.1.3 Data collection costs

Tables A15.1 to A15.4 in Appendix 3 give detailed estimates of the marginal cost per stage for each group, using a method similar to that adopted by Lynn and Sala (2004). The main costs of conducting the survey are not included because they occur regardless of how many times the sample is followed up. However, the cost of dealing with undelivered items has been added to the initial mailing costs for businesses because this was not part of the cost of data collection from the other groups. Some unit costs are made up of several parts, e.g. the cost of sending a postcard includes printing (1.25p), cutting (0.177p), a label (0.146p) and postage (23p).

In this study, a researcher followed up undelivered items and carried out telephone calls to businesses and schools. A member of the clerical staff carried out the telephone follow-up of local authorities after a short period of training. If clerical staff were employed for the whole follow-up in a larger survey, more time for training would have to be included in the cost. Lynn and Sala (2004) suggest that for a business survey, telephone interviewers 'should be thoroughly versed in the design and objectives of the survey . . . as business survey respondents may represent a particularly informed study population.'

The summary presented in Table 7 shows that the telephone follow-up proved to be an expensive method compared with posting replacement questionnaires, even if the cost per response is ignored. Using a researcher for most of the follow-up has increased the cost of following up businesses and schools. However, the cost per sample unit for a clerical assistant to phone local authorities, which includes one hour of researcher time for training, remains relatively high.

Table 7: Summary of estimated cost of data collection: businesses, schools and local authorities

Stage		Business	Primary schools	Secondary schools	Local authorities
First mailing and reminder	Cost per sample unit (£)	1.18	1.12	1.04	0.87
	Cost per response (£)	10.42	2.35	2.85	9.17
Replacement questionnaires	Cost per sample unit (£)	0.68	0.88	0.69	-
	Cost per response (£)	3.42	1.77	3.24	-
Telephone follow-up	Cost per sample unit (£)	6.23	4.06	5.30	3.63
	Cost per response (£)	28.67	16.25	31.81	69.02

3.2 Action to promote health

The data suggest that schools are much more involved in promoting health than businesses. Business respondents did however appear to accept a greater share of responsibility in the area of accidents and injuries than in any other health-improvement area. These findings are consistent with evidence in the literature of the level of engagement of schools and businesses with concepts of sustainable development and health promotion.

Answers to questions about participation in health-promotion initiatives demonstrated the difference in the level of engagement between schools and businesses, with a majority of schools respondents reporting involvement in several different initiatives compared with a minimal level of participation by business respondents. Amongst the most popular initiatives were those promoting exercise and healthy eating. Charities seem to play a large part, particularly in organising fundraising events involving exercise, such as fun runs. In addition, secondary schools were involved in initiatives organised by a variety of local agencies. There is evidence of a lack of clarity about names of initiatives and whether they came from the Welsh Assembly, local or UK/international level, with some respondents mentioning 'initiative overload'. Using health-improvement areas to categorise initiatives might have been more user-friendly.

In response to questions asking about barriers and facilitators of health-promotion action, many schools respondents identified structural issues such as the demands of the curriculum; and inadequate funding or facilities. There were also limiting factors associated with the local environment such as lack of space around the school. Many schools respondents expressed a wish for more support from local education authorities and more links with local health services.

Some respondents from both businesses and schools felt they were doing enough to promote health. Three from businesses said it was up to individuals to look after their own health. There was a view from some business respondents that health promotion locally would not be

supported by others in the organisation and that there was a role for national government in getting the message across at a more senior or central level.

Few respondents mentioned that Health Challenge Wales had been a factor in promoting health-promotion action. Most of those whose organisations were promoting health appeared to have done so independently of Health Challenge Wales. Most who had been influenced by the Challenge said it had worked by raising their awareness and/or prompting further action.

Written policies on accidents and injuries were most often reported by respondents from both businesses and schools, suggesting that action in this health-improvement area may be more effective than in others. Written policies on obesity were reported by the fewest number of respondents. Since many schools report participation in initiatives promoting exercise and healthy eating, this finding may result from the use of the word 'obesity' which possibly has negative connotations which are not readily connected to healthy eating and exercise. About a third of answers from businesses indicated they had written policies on smoking; and alcohol and other substance misuse. Since action is more likely to be effective when backed up by written policies, this could be a sign that businesses are taking effective action to improve health in these areas.

A large majority of both primary and secondary schools made an effort to promote health, over and above what they did as part of their main functions. The response from businesses was very different, with only half of those who answered this question saying they did anything to promote health (Table 8).

Table 8: As well as carrying out its main functions, does your [organisation] do anything aimed at promoting health? Answers from businesses and schools

	Yes	Plan to act in next 6 months	No	Not answered	Total
Businesses	16	2	14	0	32
Primary schools	69	3	1	1	74
Secondary schools	77	4	1	1	83
Total	162	9	16	2	189

Businesses taking action to promote health were less likely than schools to say they wanted to do anything more, as shown in Table 9.

Table 9: Apart from any practices you may have mentioned in Section A, is there any action you would like to take to promote health? Answers from businesses and schools who were already taking action to promote health

	Ye	es	N	0	Not	sure	Not answered		Total (100%)
	n	%	n	%	n	%	n	%	n
Businesses	3	19	6	37	6	37	1	6	16
Primary schools	29	43	21	31	9	13	9	13	68*
Secondary schools	44	57	18	23	9	12	6	8	77

^{*} One respondent said this question was not applicable because the school was working towards assessment as a healthy school.

And of those businesses not taking any action, at least half did not want to (Table 10).

Table 10: Apart from any practices you may have mentioned in Section A, is there any action you would like to take to promote health? Answers from businesses and schools who were not taking action to promote health

	Yes	No	Not sure	Not answered	Total
Businesses	0	7	5	2	14
Primary schools	0	0	1	0	1
Secondary schools	0	0	0	1	1

3.3 Facilitators and barriers to health-promotion action

Three questions were related to facilitators and barriers to health promotion. Details of question content and the numbers of answers from businesses and schools are shown in Table 11.

Table 11: Facilitators and barriers to health-promotion action: number of answers to relevant questions from businesses and schools

	Businesses	Primary schools	Secondary schools	Total
What would help you to take action to promote health?	6	36	52	94
What would be a barrier to action to promote health?	5	22	33	60
Give brief details of why you would not like to act or are not sure whether you would like to act to promote health.	18	21	21	60
Total	29	79	106	214

There are common elements to many answers and these are discussed together below. One business respondent said they did not want to act to promote health because they worked at home, and this is a reminder of the wide variation in settings and organisation of business activity.

The answers suggest that business respondents do not have a well-developed concept of promoting health and that they may not always make a clear distinction between removing harmful working conditions and taking action to improve health; or between preventive and therapeutic roles. A few remarks also suggested an expectation that if businesses were to take more action to promote health, their responsibility to do so should be imposed by national government.

Respondents from both primary and secondary schools already accept responsibility for, and take action to promote health but perceive barriers to further action. In particular, schools appear to need more support from the school meals service, parents and local authorities to improve the quality of food available to pupils during the school day.

3.3.1 Not our responsibility

Eight business respondents, but none from schools, suggested a reluctance to accept responsibility for health, expressed in remarks attributing a role to others, for example:

'It's up to the individual to look after their health.'

'Health is a personal thing. A lot of people are very reluctant to discuss their health.'

'All health and safety issues are dealt with at our head office'

'This is an excellent initiative. I think however schools are vital in promoting the health of the nation. Health and Education in partnership here are very powerful change agents.'

3.3.2 There's no need

Another view was that there was no need for (more) health-improvement action. Business respondents gave various reasons, including:

'All our employees are healthy, active and eat healthy – none are obese or overweight'

'Already sufficiently involved in employee well-being initiative.'

'Enough health measures as it is. Always getting correspondence from HQ.'

'Good facilities provided on site, no-smoking policy active, further action is up to the individual.'

Twenty-one schools respondents felt that there was no need for any further action to promote health because they were already doing enough, for example, 'Feel all areas covered by school curriculum and input from outside providers.'

3.3.3 My organisation could take action to promote health if . . .

Some comments from businesses suggested that they accepted responsibility for health but did not have enough support or resources to take action. Schools appeared to be already taking action but held back from extending this by the same sort of barriers which inhibited businesses, 'Unfortunately far too often many ideas are thwarted due to the costs involved and budget restraints.' (Secondary)

3.3.3.1 Resources, time and cost

Eight business respondents mentioned the relationship of resources, time and cost to whether or not they would take action to promote health. Their answers suggested that extra resources, in the form of incentives which did not incur an extra cost to the company, would encourage health-promotion action and that the cost of taking action, in terms of time and money, was a barrier to some companies.

For schools, pressure on staff time and workloads imposed by large classes; excessive paperwork; a large number of different health-promotion initiatives; and a lack of designated staff or time to carry out health-promotion work were seen not only as barriers to extending action to improve health but also as threatening the health of staff: *'[It would] impinge on mental health and well being if we try to do too much'*. Most respondents thought time should be allowed within the curriculum so that staff could, for example, offer more periods for PE or sport and one secondary-school respondent said more could be done to promote health if *'the National Curriculum placed greater emphasis on healthy lifestyles rather than the pursuit of results in examinations.'*

Many respondents from schools, but none from businesses, said the physical environment of the school was a barrier to health-promotion action. One felt that the whole school needed to be rebuilt and suggested it would help to have

'enough money to rebuild a school which is no longer fit for purpose and which has poor facilities for hygiene, limited space for circulation and little space to use by pupils when it is wet.'

Others also reported a lack of basic cleanliness and toilet facilities; and a need for space and equipment for outdoor activities.

3.3.3.2 Support for health promotion inside and outside the organisation

Responses from schools indicated a need to enlist the support of all stakeholders in promoting health and for some effort to be made at local and national government levels to coordinate support coming from different agencies. This was illustrated most vividly by head teachers' comments relating to efforts to improve pupils' diet. Many appeared frustrated by their lack of control over the quality of meals and the contents of vending machines within their own schools, for example: 'What is the point of a school having Healthy Initiatives if a Leisure Centre run by the County on the same site contains drinks/sweets machines?'

Pupils' and parents' resistance to changes in eating habits were acknowledged as a significant barrier – for example, one respondent mentioned pupils' 'long held entrenched attitudes' and another head teacher wanted 'more rights to discuss the contents of children's lunchboxes'. More generally, across other health-improvement areas, existing contributions from external agencies, particularly health professionals, were highly valued by schools respondents. Some would like more access to NHS staff and health professionals, particularly school nurses. As for school meals, parents' support was seen as a precondition for effective action, for example,'... healthy drives have been introduced in the past, but not supported by parents even though programmes about obesity, heart disease etc. are prevalent.' A number of schools mentioned the desirability of access to local support; for example, one said it would be helpful to have a centre of good practice available locally. Two heads mentioned local conditions as a barrier, highlighting the difficulty of trying to promote health in deprived communities with high levels of vandalism.

Comments from business respondents did not mention these sorts of conflicts but they did have some needs for support in common with schools. Three would have liked more staff training and help in obtaining information: 'Unsure of whom to contact for assistance to promote health.' Schools respondents also wanted more information about initiatives, including 'the needs of commitment from the teachers to implement the scheme', and cover for teachers to attend training courses. One secondary-school respondent pointed out that they were able to take action 'because we are supported by Health Education Coordinator and PSE adviser'.

Nine schools respondents felt that coordination of health-promotion initiatives should take place at national/intermediate level, and not be left to schools, for example, '[My school could take action to promote health if] there was greater liaison with health organisations in facilitating – i.e. an overall approach rather than piecemeal quangos.'

However, answers from business respondents suggested that they saw the role of national government as enforcing, rather than coordinating, business action to improve health, for example, '[My company could take action to promote health if] it was required of me by a top down Government initiative.' Unlike schools, two business respondents also felt they needed more support from within their own companies. One said they did not take action because 'I would be alone in this – no support from management. No initiatives or rewards. Because I'm overworked and don't have to.'

3.4 Participation in health-promotion initiatives

3.4.1 Welsh Assembly initiatives

Business respondents were asked to indicate if they had taken part in any of five health-promotion initiatives which were listed in the questionnaire. As shown in Appendix 4, five reported taking part in No Smoking Day during the previous twelve months; one had a Workplace Travel Plan.

The picture was very different for schools. The tables in Appendix 4 show how many took part in Welsh Assembly health promotion initiatives. A large majority of both primary and secondary schools had participated in one or more of twenty (primary) or fifteen (secondary) initiatives listed in the questionnaire. The largest number of respondents said their schools had taken part in the All Wales Schools Police Liaison Programme in the previous twelve months – 62 respondents (85%) from primary schools and 62 (76%) from secondary schools. A majority of primary-school respondents also reported participating in sports programmes and another exercise initiative – The Class Moves! Sixty respondents (82%) said their schools had taken part in Dragon Sport; fifty (68%) in the PE and School Sport Programme; and forty-four (60%) in The Class Moves! Most respondents said primary schools had taken part in the Circle Time (62%) and Fruit Tuck Shop (60%) initiatives.

Only four respondents' primary schools (5%) had participated in an exercise initiative for adults, the Fit In Campaign. More had taken part in initiatives for adults in their role as teachers: fifteen (20%) in the Teaching Awards – Health Promoting School Category; and six (8%) in Teacher Support Cymru. This picture was similar for secondary-school respondents: only 13 (16%) had participated in the Teaching Awards; 5 (6%) in Teacher Support Cymru and 7 (8%) in the Fit In Campaign. On the whole, initiatives which were likely to improve the health of pupils appear to be more popular with respondents than those intended to improve the health of staff.

While a majority of secondary-school respondents reported participation in the PE and School Sport Programme (67%), anti-smoking initiatives seemed to be more popular than exercise. Fifty-nine secondary schools (72%) had participated in No Smoking Day and 51 (62%) in the Smokefree Class Competition. Anti-smoking initiatives were less frequently mentioned than exercise by primary schools respondents - only 18 primary-school respondents (25%) had taken part in No Smoking Day and 32 (44%) in Smoke Bugs! A larger proportion of secondary schools than primary schools had taken part in Think Water (60% v. 47%) and slightly more had participated in the Welsh Network of Healthy School Schemes (55% v. 49%). None had taken part in the Soil Association School Food Awards, although two said they planned to do so.

Five respondents used the 'Additional comments' section of the questionnaire to express appreciation of the value of Welsh Assembly initiatives. One said, 'It should be compulsory for every school to undertake the Assembly's scheme to promote health.'

3.4.2 Local health-promotion initiatives

Lists of local health-promotion initiatives mentioned by schools respondents are shown in Appendix 5. Seventeen primary-school respondents (23%) reported that their schools had taken part in health-promotion initiatives organised locally. Most were related to physical exercise and a large number were healthy eating initiatives.

Twenty-seven respondents from secondary schools (33%) reported participation in locally-organised schemes. Whereas the emphasis in primary schools seemed to have been first of all on exercise and secondly on food, these were the other way around for secondary-school respondents, with healthy food initiatives mentioned most often in answer to this question.

The range of health-improvement areas covered by initiatives reported by secondary schools was greater than for initiatives reported by primary-school respondents and included general health-promotion initiatives, smoking, social education, alcohol, back care and drugs. Secondary-school respondents also reported many initiatives involving liaison with local organisations including health boards and local authorities. Two businesses had participated in local health-promotion initiatives.

3.4.3 UK/international health-promotion initiatives

Three businesses had taken part in national initiatives, all of them fund-raising activities for charities. UK/international health-promotion initiatives mentioned by schools respondents are listed in Appendix 6. Twenty respondents (27%) reported that their primary schools had taken part in health-promotion initiatives organised at UK or international level. Some of these, such as Jump Rope for Heart, were initiatives which other respondents had reported as locally organised initiatives, indicating some uncertainty about this aspect. Most initiatives were related to charities – either they were organised by charities or were part of fundraising activities.

Thirty-six (44%) respondents from secondary schools had participated in initiatives organised at UK/international level. As with primary schools, most were charity-related initiatives and the Race for Life was mentioned most often – by 7 primary-school respondents and 15 respondents from secondary schools. The distinction between initiatives organised locally and those organised at UK/international level does not appear to have been useful in this survey. Many respondents mentioned again initiatives already ticked in the list of Welsh Assembly initiatives. Twelve respondents from primary schools and 15 from secondary schools reported participation in Healthy Schools Schemes both by ticking the list and by responding to an open-ended question. Other initiatives mentioned more than once were teaching awards; health promoting playgrounds; Schools Police Liaison Programme (3); Safe Routes (2); Dragon Sport; Class Moves; PESS (3); ECO schools (2) and Smokefree Class Competition (2).

This may result from an overlap between the two questions but could also reflect uncertainty about the origin or names of different initiatives, e.g. one respondent referred to 'Teaching Rewards'; some mentioned just 'Healthy Schools' while others seemed to want to make it absolutely clear what they were talking about – 'We are currently taking part in the LEA's "Healthy Schools Project". We have been awarded 3 'leaves' for completing 3 years of health promoting schools projects.' There was much similarity between the names of some initiatives

mentioned by respondents and these have been recorded separately because they may not always refer to the same initiative. It is also possible that the researcher may be mistaken in thinking that many of these initiatives are the same as those already ticked on the list.

3.5 Policies for health improvement

Most businesses and schools had written policies on accidents and injuries and fewest had written policies on obesity. Thirty-seven percent (12) of business respondents reported that their organisations had written policies on smoking and alcohol and other substance misuse. If action tends to be more effective when backed up written policies (Hartland, Tudor-Smith and Roberts 1997), then although business respondents do not demonstrate commitment to health promotion by participating in initiatives, they may nevertheless be enabling individuals to improve their health by different kinds of action, at least in these two areas. Table 12 gives details of numbers and percentages of respondents reporting written policies.

Table 12: Number of schools and businesses with written policies for health improvement, by health improvement area

Health-improvement area	Businesses (n = 32)	Primary schools (n = 73)	Secondary schools (n = 82)
Smoking	12 (37%)	34 (47%)	50 (61%)
Obesity	4 (12%)	2 (3%)	3 (4%)
Accidents and injuries	16 (50%)	51 (70%)	64 (78%)
Alcohol and other substance misuse	12 (37%)	26 (36%)	50 (61%)
Infections	6 (19%)	21 (29%)	9 (11%)
Mental health and well-being	5 (16%)	9 (12%)	9 (11%)
Other	2 (6%)	3 (4%)	2 (2%)

In view of the large number of schools taking part in healthy food, sports and PE initiatives, it is unexpected that so few schools had a written policy on obesity. Possibly the word 'obesity' has negative connotations which mean people are reluctant to relate it to pupils or colleagues. Asking about policies on 'healthy eating' and 'physical activity' may have evoked a different response.

3.6 Impact of Health Challenge Wales

Overall, the impact of Health Challenge Wales appeared to be small. It had least effect on business respondents, of whom nearly three quarters had not heard of it. The answers given by businesses suggested a rejection of responsibility for promoting customers' health but some acceptance of responsibility for employees' health. In schools, this was the other way around. There was a widespread acceptance of responsibility for promoting pupils' health but the health of staff was likely to be forgotten or consigned to second place. In both businesses and schools, health-promotion action tended to be independent of any influence from Health Challenge Wales.

3.6.1 Customers and pupils

None of the businesses said that Health Challenge Wales had influenced their views or practice on promoting the health of customers. However, it appears to have had some effect in both primary and secondary schools on views and practice on promoting the health of pupils. This effect was small - only 17% of schools respondents said they had been influenced by Health Challenge Wales (Table 13).

Table 13: Has Health Challenge Wales influenced your views or practice on promoting the health of customers/pupils? Answers from businesses and schools

	Yes		No		Not sure		Not heard of this		Not answered		Total
	n	%	n	%	n	%	n	%	n	%	(100%)
Businesses	0	0	3	9	5	16	23*	72	2	6	32*
Primary schools	16	22	9	12	11	15	33	45	4	5	73
Secondary schools	17	20	15	18	16	19	32	38	3	4	83
Total	33	17	27	14	32	17	88	47	9	5	188

 $^{^{}st}$ One respondent who said they had not heard of Health Challenge Wales answered this question as well.

All of the sixteen primary schools and 15 of the 17 secondary schools which had been influenced also gave reasons why. Many answers (13) said that Health Challenge Wales had raised awareness by publicising the importance of health promotion, reminding them of their responsibility or drawing attention to health problems nationally. Seven schools said Health Challenge Wales had prompted them to take some sort of health-promotion action – three of them said this was working towards Healthy School status. Another six said Health Challenge Wales had provided a focus, target or objective for them to follow; and four that it had influenced them by providing practical advice, support and resources.

Of those who had not been influenced, two of the three businesses, five of the nine primary schools and thirteen of the fifteen secondary schools gave reasons why. The responses from businesses suggested a denial of responsibility for promoting the health of customers:

'Don't have much contact with customers' and 'Everyone should look after themselves'

However, the character of the answers from schools was quite different. Two primary school respondents said it had not influenced them because they did not know much about it. Other reasons were lack of time (2), 'Materials largely irrelevant to secondary' and 'Pack sent for, but not received'

However, the reason most frequently given was that people were already aware and/or taking action to promote health and this was supported by two remarks from primary schools and ten secondary schools that they were already taking action, e.g. 'We believe in this aspect strongly anyway' (Primary) and 'Already addressing health and social issues as part of our work prior to Health Challenge Wales' (Secondary)

Answers to the question about whether organisations were promoting health revealed that most schools and businesses which were already taking health-promotion action appeared to do so independently of Health Challenge Wales. Tables 14, 15 and 16 show that of those taking

action, respondents who had not heard of Health Challenge Wales outnumbered those who had by at least two to one.

Table 14: Answers about the influence of Health Challenge Wales and action to promote health: businesses

		Nu	511163363		
Has Health Challenge Wales influenced your views or practice on promoting health?		Already taking action	Planning to act	Not taking action	Total
Employees	Yes	1	1	1	3
	No	1	0	1	2
	Not sure	0	1	1	2
	Not	14	0	9	23
	heard of				
	it				
	Not	0	0	2	2
	answered				
Customers	No	1	1	1	3
	Not sure	1	1	3	5
	Not	14	0	8	22
	heard of				
	it				
	Not	0	0	2	2
	answered				

Table 15: Answers about the influence of Health Challenge Wales and action to promote health: primary schools

Has Health Challenge Wales influenced your views or practice on promoting health?		Already taking action	Planning to act	Not taking action	Total
Staff	Yes	9	0	0	9
	No	13	0	1	14
	Not sure	18	2	0	20
	Not heard of it	21	1	0	23
	Not answered	8	0	0	8
Pupils	Yes	15	1	0	16
	No	8	0	1	9
	Not sure	11	0	0	11
	Not heard of it	31	2	0	33
	Not answered	4	0	0	4

Table 16: Answers about the influence of Health Challenge Wales and action to promote health: secondary schools

Has Health Challenge Wales influenced your views or practice on promoting health?		Already taking action	Planning to act	Not taking action	Not answered	Total
Staff	Yes	11	0	0	0	11
	No	18	0	0	0	18
	Not sure	16	2	1	0	19
	Not heard of it	25	2	0	0	27
	Not answered	7	0	0	1	8
Pupils	Yes	15	2	0	0	17
	No	14	0	0	1	15
	Not sure	15	0	1	0	16
	Not heard of it	30	2	0	0	32
	Not answered	3	0	0	0	3

3.6.2 Employees

A few respondents (12%) said that Health Challenge Wales had influenced their views and practice on promoting the health of employees. Again, there was more effect on schools than on businesses (Table 18).

Table 17: Has Health Challenge Wales influenced your views or practice on promoting the health of employees? Answers from businesses and schools

	Yes		No		Not su	ıre	Not he of this		Not answe	ered	Total
	n	%	n	%	n	%	n	%	n	%	(100%)
Businesses	3	9	2	6	2	6	23	72	2	6	32
Primary schools	9	12	14	19	20	27	33*	45	8	11	73
Secondary schools	11	13	18	22	19	23	32**	38	8	10	83
Total	23	12	34	18	41	22	78	41	18	10	188

^{*}Nineteen respondents and **thirteen respondents who said they had not heard of Health Challenge Wales nevertheless answered this question as well.

Two of the three businesses which had been influenced by Health Challenge Wales gave reasons why. Both businesses indicated that it had raised awareness and one said:

'By showing an interest in the workplace by instigating the research. Has encouraged me to think of the possibilities.'

Twelve school respondents also said Health Challenge Wales had influenced them by raising awareness. This was not always related to the needs of the staff themselves:

'Raising everyone's awareness of the needs of students' (Secondary)

'Reminding us of our responsibility' (Secondary)

'Encouraging targets for pupils and by raising awareness of healthy eating' (Secondary) 'Ensuring staff set good role models for pupils' (Primary)

However, a few said that Health Challenge Wales had encouraged them to promote employees' health by providing more opportunities for social activities and physical exercise and in one case, extending the school counselling service to staff. Two primary-school respondents said it had instigated discussions about health during ADDS sessions and INSET training. Two answers from secondary schools said that Health Challenge Wales had influenced them by providing information and 'laying down national standards'.

Two business respondents, four from primary schools and fourteen from secondary schools gave reasons why Health Challenge Wales had not influenced their views or practice on promoting the health of employees. One business did not appear to accept responsibility as it was felt that 'it's down to each individual to maintain their health'. However, the other business respondent said 'Generally through the press etc. the health message is getting through' and five secondary schools reported that they were 'already doing it' independently of Health Challenge Wales.

One primary-school head said 'there are only a small number of staff in this school' as a reason. Whereas work pressures had not been mentioned as a reason relating to pupils' health promotion, they were cited in relation to staff by one primary-school and two secondary-school respondents, of whom one said: 'I cannot recall what it states – the school is swamped by policy initiatives from WAG and outside agencies.'

Some remarks suggested an incomplete understanding of Health Challenge Wales, for example: 'Unaware of any staff initiatives' and another said that pupils' health had to be given priority: 'Unfortunately pupils' issues must be addressed first – staff will come later.'

Other answers gave the same reasons as those relating to promoting pupils' health – lack of information; and uncertainty regarding what Health Challenge Wales is about.

3.7 Views on responsibility for health

Respondents were asked to indicate who, out of a list of eight, were the top three agencies responsible for promoting the health of employees and customers (businesses) or pupils (schools) in each of six different health-improvement areas. Business respondents accepted a greater share of responsibility in the area of accidents and injuries than in any other health-improvement area. These findings are consistent with evidence in the literature of the level of engagement of schools and businesses with concepts of sustainable development and health promotion.

Answers from both schools and businesses, taken all together, indicate that the 'top three' considered responsible for the health of employees and customers are:

- 1. The individual;
- 2. Family and friends;
- 3. National government.

There was some variation when health-improvement areas were considered separately. Smoking; obesity; and alcohol and other substance misuse seemed to be perceived by more respondents as primarily the responsibility of the individual. The wider distribution of answers relating to mental health and well being suggest that respondents see responsibility as most widely shared in this area. Business and the voluntary sector did not make the top three at all, even when looking at each health-improvement area separately.

The 'top three' responsible for promoting the health of pupils were:

- 1. Family and friends
- 2. Schools
- 3. Schools

This result is probably due to schools respondents perceiving their own organisations as taking a large share of responsibility for pupils' health. This may be a common pattern of response as it was present to some extent in answers from business respondents. When answers from primary and secondary schools respondents are considered separately, primary respondents overall give the individual third place in the top three. This is an unexpected finding since the amount of responsibility carried by individuals is more generally perceived as increasing with age. It is uncertain whether this signifies a measurement error or a real difference in perceptions.

When health-improvement areas are considered separately, larger proportions of answers named family and friends as most responsible for obesity and alcohol/other substance misuse. The distribution of answers suggests that responsibility for pupils in other health improvement areas is perceived as more widely shared, but not with businesses or voluntary groups.

3.7.1 Employees

When the results from all respondents are aggregated for all health-improvement areas (Table 18), most respondents (57% of replies) thought the individual was most responsible for promoting his or her health as an employee. For second place, most respondents selected family and friends (31% of replies); and national government received most nominations for third most responsible (21% of replies).

Table 18: Who are the top three responsible for promoting the health of employees?

Answers from businesses, primary schools and secondary schools

		Respondents from businesses		Respondents from primary schools		Respondents from secondary schools		Total replies	
		n	%	n	%	n	%	n	%
Most responsible	The individual	83	51	217	53	290	63	590	57
Second most responsible	Family and friends	44	27	107	26	167	37	318	31
Third most responsible	National government	31	19	101	25	75	17	207	21

Looking at each of the health-improvement areas separately, although most respondents nominated the individual as most responsible, there is a large variation in the size of the majority for each area (Table 19). Seventy per cent or more of replies assigned most responsibility to individuals for smoking; obesity; and alcohol and other substance misuse. Half the replies indicated individuals had most responsibility for infections and 42% said individuals had most responsibility for accidents and injuries.

Fewest respondents (36% of replies) assigned most responsibility to individuals for mental health and well being. Twenty per cent of replies said the NHS had most responsibility in this area and others assigned most responsibility to national government (12% of replies), family and friends (11% of replies) and local councils (10% of replies). A few (8% of replies)

considered that schools had most responsibility and fewer still – only two respondents in each case - thought businesses or voluntary groups were most responsible.

Table 19: Top three responsible for promoting the health of employees, by healthimprovement area: Replies from businesses, primary schools and secondary schools

	First		Seco	ond	Third		
		n (%)		n (%)		n (%)	
Smoking	The individual (n = 173)	121 (70%)	Family and friends (n = 170)	63 (37%)	National government (n = 167)	43 (26%)	
Obesity	The individual (n = 172)	124 (72%)	Family and friends (n = 170)	76 (45%)	NHS (n = 166)	49 (29%)	
Accidents and injuries	The individual (n = 172)	73 (42%)	Local councils (n = 171)	41 (24%)	National government (n = 167)	39 (23%)	
Alcohol and other substance misuse	The individual (n = 175)	124 (71%)	Family and friends (n = 169)	74 (44%)	National government (n = 168)	36 (21%)	
Infections	The individual (n = 172)	86 (50%)	NHS (n = 169)	45 (27%)	National government (n = 163)	31 (19%)	
Mental health and well being	The individual (n = 170)	62 (36%)	Family and friends (n = 168)	48 (29%)	The individual; NHS (n = 164)	35 each (21% each)	

No respondents thought that businesses were most responsible for four of the six areas of health improvement – smoking; obesity; alcohol and other substance misuse; and infections. Thirty-seven per cent of replies from businesses, and 4% from secondary schools, indicated that businesses had most responsibility for accidents and injuries, suggesting that this may be the only area in which businesses accept a major share of responsibility for health improvement.

In the areas of smoking; and alcohol and other substance misuse, the responses follow the overall pattern but in the area of obesity, the NHS supplants national government as the third most responsible; and local councils, rather than family and friends, were thought by most respondents to be second most responsible in the area of accidents and injuries. Family and friends did not come into the top three responsible in the area of infections, with the NHS receiving most nominations as second most responsible. Finally, in the area of mental health and well being, national government was not in the top three; instead the NHS and the individual were selected by equal numbers as the third most responsible.

Businesses and voluntary groups did not come into the top three – being nominated by only 69 respondents and 75 respondents respectively. However, businesses were nominated by business respondents 47 times (22 times in the area of Accidents and injuries). If respondents from voluntary groups had been included in the survey, they may have been more likely to perceive responsibility resting with their own sector. In addition, the number of business respondents was small compared with the number of respondents from schools (27:381) so the business perspective on responsibility was under-represented in this sample. However, the answers do demonstrate how few respondents from schools thought that businesses carry responsibility for any areas of health improvement.

3.7.2 Customers

Question 18 of the questionnaire asked respondents who they thought were the top three responsible for promoting the health of the population served. For businesses, this group consists of their customers or clients and for schools, their pupils. The two groups are considered separately because the relationship between businesses and customers differs from that between schools and pupils. For example, most customers are not children, whereas most school pupils are minors and may be considered as to some extent in need of care and protection. Schoolteachers are *in loco parentis* and carry a special kind of responsibility for children's welfare, but customers are, for the most part, expected to make their own decisions.

Most respondents from businesses (37% of replies) thought that customers had primary responsibility for their own health improvement. However, 16% of replies indicated that businesses had most responsibility for customers' health overall, with 41% of replies saying that businesses had a primary responsibility in the area of accidents and injuries. Obesity (2) and infections (2) were areas in which fewest business respondents thought businesses carried most responsibility for customers.

Fewest respondents saw a primary responsibility for local councils (4% of replies) or voluntary groups (2% of replies) in improving customers' health. Family and friends (6% of replies) and schools (7% of replies) were also chosen by a small minority of business respondents. However, the NHS (18% of replies) and national government (10% of replies) were considered to have a primary role by substantially more business respondents.

Looking at the order for all health-improvement areas together, it is the same as for employees, with the individual most responsible, family and friends second most responsible and national government third most responsible (Table 20).

Table 20: Who are the top three responsible for promoting the health of customers?

Total answers from businesses

	Smoking		Obe	sity	Accid and injuri		Alcol and o subs misu	other tance	Infec	tions	Men heal and well bein	lth	Tota repl	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
1. The individual	11	41	12	44	7	26	10	37	10	37	9	35	59	37
2. Family and friends	3	11	7	26	2	7	6	22	6	22	10	38	34	21
3. National government	6	22	5	18	13	48	6	22	8	30	7	27	45	28

When the top three for each health-improvement area are considered, business respondents nominated businesses as most responsible in the area of accidents and injuries, and the individual was not in the top three at all.

Table 21: Who are the top three responsible for promoting the health of customers?

Answers from businesses, by health-improvement area

	Aliswers iroi					
	Firs	t	Seco	ond	Thi	rd
		n (%)		n (%)		n (%)
Smoking (n = 27)	The individual	11 (41%)	National government	8 (30%)	Individual; NHS; National government	6 each (22% each)
Obesity (n = 27)	The individual	12 (44%)	Family and friends	7 (26%)	NHS	6 (22%)
Accidents and injuries (n = 27)	Businesses	11 (41%)	Local councils; Businesses	8 each (30% each)	National government	13 (48%)
Alcohol and other substance misuse (n = 27)	The individual	10 (37%)	The individual; Family and friends	6 each (22% each)	NHS; National government	6 each (22% each)
Infections (n = 27)	The individual; NHS	10 each (37% each)	Family and friends; Local councils; NHS	6 each (22% each)	National government	8 (30%)
Mental health and well being (n = 26)	The individual	9 (35%)	Family and friends	10 (38%)	National government	7 (27%)

3.7.3 Pupils

The aggregated results for all answers from schools show that most respondents chose family and friends as having most responsibility for children's health (Table 22). Most answers said that schools were second most responsible, and an equal number that schools were third most responsible. These responses indicate that schools respondents perceive their own organisations as carrying a very large proportion of responsibility for pupils' health, as might be expected from findings in other parts of the questionnaire. However, a remark in the 'Additional comments' section suggested that not everyone is content to accept such a large share of responsibility:

'Schools are expected to take on responsibilities purely because they have access to the pupils. Please look at the support provided by agencies in Scotland.' (Secondary)

Table 22: Who are the top three responsible for promoting the health of pupils? Answers from primary schools and secondary schools

	Respondents from primary schools		Respon from second schools	ary	Total replies		
	n	%	n	%	n	%	
1. Family and friends	171	43	152	34	323	38	
2. Schools	122	31	138	31	260	31	
3. Schools	91	23	169	39	260	31	

When the results for primary and secondary schools are considered separately (Tables 23 and 24), most primary-school respondents thought that the individual was third most responsible. It

appears that children may be regarded as capable of less responsibility as adolescents than as infants.

Table 23: Who are the top three responsible for promoting the health of pupils? Answers from primary schools

	n	%
Family and friends	171	43
2. Schools	122	31
3. The individual	108	27

Table 24: Who are the top three responsible for promoting the health of pupils? Answers from secondary schools

	n	%
Family and friends	171	43
2. Schools	122	31
3. Schools	169	39

With few exceptions, schools respondents seem to perceive most responsibility for promotion of pupils' health as shared between family and friends; and schools. However, in contrast to business respondents, who did not give individuals a place in the top three responsible for accidents and injuries, the individual had a majority of replies from schools respondents as being third most responsible in this area. Twenty-one respondents from primary schools (34%) and fifteen from secondary schools (20%) selected the individual as the third most responsible, suggesting that it is in this area that primary schoolchildren may be thought capable of taking more responsibility than secondary-school pupils.

In the rest of the health-improvement areas, most schools respondents thought Family and friends were most responsible, with the exception of Infections, where most thought the NHS was most responsible. Schools were thought to be both second and third most responsible in all areas except Accidents and injuries (Table 25).

Table 25: Who are the top three responsible for promoting the health of pupils? Answers from primary and secondary schools, by health-improvement area

	Firs	1	Seco	ond	Third	
		n (%)		n (%)		n (%)
Smoking	Family and friends (n = 146)	50 (34%)	Schools (n = 146)	61 (42%)	Schools (n = 143)	46 (32%)
Obesity	Family and friends (n = 140)	78 (56%)	Schools (n = 141)	39 (28%)	Schools (n = 137)	51 (37%)
Accidents and injuries	Family and friends (n = 135)	32 (24%)	Schools (n = 135)	50 (37%)	The individual (n = 134)	36 (27%)
Alcohol and other substance misuse	Family and friends (n = 144)	70 (49%)	Schools (n = 143)	41 (29%)	Schools (n = 142)	55 (39%)
Infections	NHS (n = 144)	53 (37%)	Schools (n = 143)	34 (24%)	Schools (n = 140)	46 (33%)
Mental health and well being	Family and friends (n = 133)	49 (37%)	Schools (n = 132)	35 (26%)	Schools (n = 129)	35 (27%)

One hundred and seventy answers from schools put local councils in the top three responsible for promoting pupils' health; forty-six put voluntary groups in the top three and only 22 nominated businesses. Table 26 gives details.

Table 26: Number and percentages of answers from schools respondents putting local councils, businesses and voluntary groups in the top three responsible for pupils' health

	Local councils	Businesses	Voluntary groups	Total
1 st (n = 842)	39 (5%)	2 (<0.3%)	4 (<0.5%)	45 (5%)
2 nd (n = 840)	78 (9%)	11 (1%)	16 (2%)	105 (12%)
3 rd (n = 825)	53 (6%)	9 (1%)	26 (3%)	88 (11%)
Total (n = 2,507)	170 (7%)	22 (1%)	46 (2%)	238 (9%)

4. Resources and methodological implications for future surveys

The present survey was planned as part of a larger evaluation of Health Challenge Wales and was intended to pilot survey methods for future surveys. The low response rate which is currently noted as a matter of concern in the context of a pilot study would compromise the validity of any future surveys monitoring the impact of Health Challenge Wales. Therefore it is important, before any further survey is planned, to address the problem of obtaining satisfactory response rates. Findings in this survey tend to support other evidence that in postal surveys of organisations, following up initial mailings and addressing questionnaires to named individuals are basic strategies for increasing response and should be adopted in future surveys. Following up all non-respondents to the current survey, instead of a small sample, could well have improved the response rate.

The relatively high cost of the telephone follow-up in this survey is likely to be due in part to the small sample size; the cost of a researcher's (not clerical assistant's) time; and an opportunistic approach to data collection. Lynn and Sala (2004) also report a relatively high cost for telephone follow-up so these factors are unlikely to account for all of the difference in cost between telephone and other stages. Further investigation is needed to clarify the cost of telephone follow-up of larger samples using clerical support (including training costs) and with a clearer focus on the aims of follow-up. If resources are limited, the relative costs of the different stages of the current survey suggest they should be invested in efforts to obtain a high response to initial mailings and a postal follow-up using replacement questionnaires.

Evidence from the telephone follow-up suggests that a major factor underlying non-response to the present survey was that recipients of the questionnaire did not think it was important to complete it. This was sometimes related to a heavy workload; too much paperwork; and 'questionnaire overload' and it is perhaps understandable that the questionnaire was neglected in order to attend to more urgent matters. If this point of view is accepted, then the characteristics of the minority who did complete and return the questionnaire become more interesting, since presumably many of them are also busy people. Before conducting any future survey of health promotion, it may be useful to return to a sample of respondents from each group and explore the factors which prompted them to respond.

The ability of the questionnaire to measure the degree of involvement in, and views about, health promotion across such a varied range of organisations has not been demonstrated. Ideally, the validity of the questionnaire would be more extensively tested with individuals from each kind of organisation and from different business sectors. For example, Dippo, Chun and Sander (1995) suggest the use of focus groups to clarify survey concepts and their indicators; and 'think-aloud' methods which ask respondents to talk through the mental process they go through when answering the questions. If surveys are to be repeated at regular intervals, Griffiths and Linacre (1995) suggest keeping a 'questionnaire history file' to record all questionnaire changes and the reasons for them. This method, they claim, has improved the quality of business survey questionnaires issued by the Australian Bureau of Statistics.

While the above points apply to all the groups included in the current survey, there are some concerns which affect only the business sector. These relate to the sample frame and the process of obtaining names of individuals who can answer the questions.

Construction of a comprehensive sample frame of businesses in Wales is essential if future surveys are to be of value. If it is not possible to use an existing official database then a comprehensive frame could be constructed by adding to an existing list from FAME or other

commercial database. This would probably require negotiation with the WDA and other business organisations; maintaining and updating the list; and comparing it with summary statistics from official registers to check its coverage.

Identifying named individuals in businesses was more difficult than for other groups involved in this survey. When planning any future survey of the business sector it would be advisable to prioritise time and resources for some initial work to identify named individuals who are the most appropriate addressees and for dealing with undelivered questionnaires. The low response rate from businesses; and the evidence from those which did respond of a lack of involvement in health promotion, tend to support evidence from the literature that businesses do not perceive that they have a role in health promotion other than by providing a safe working environment. Salience is a key element in improving postal survey response (Dillman 2000). There may be some merit in deferring further studies of health promotion in businesses until there is evidence of a change in attitudes towards the topic. Alternatively, more thorough pre-testing of questionnaires may reveal how health promotion can be made to appear more salient to business respondents.

The disappointing response of local authorities to the survey appears to be related to the complexity of these organisations. Posting questionnaires to named council leaders has clearly not been an effective method of data collection in the current survey. Preliminary enquiries would be advisable before any future study, to determine whether questionnaires should be addressed to council leaders or other members or officers of the council; and preferred methods of contact e.g. post, e-mail or fax. Preferences for different modes of contact might also be a useful topic to explore with other survey groups.

There is evidence from the United States that postal surveys of organisations can obtain response rates of over 80% (Paxson, Dillman and Tarnai 1995). However, in the UK the surveys with the most consistently high response rates have used face-to-face interviews (Cully et al. 1999). Lynn and Sala's (2004) response rate was less than this (72%) for their UK postal survey even though the study was facilitated by the method used for identifying named individuals in the survey organisations and used extensive follow-up methods. Face-to-face interviews are an expensive method of data collection but possibly less expensive in the long run than postal methods with low response rates. They would be especially worth considering for collecting data from the relatively small number of local authorities in Wales.

There is little detail in reports of other UK surveys on methods used and their effect on response. To improve the quality of future surveys, authors and editors might consider giving more attention to the fine detail of method and its effect on survey samples.

5. References

Archer D (1995) 'Maintenance of Business Registers' in Cox BG, Binder DA, Chinnappa BN, Christianson A, Colledge MJ, Kott PS (1995) *Business Survey Methods* New York: Wiley

Baric L (1993) The settings approach: implications for policy and strategy *Journal of the Institute* of *Health Education* 31(1) 17-24.

Bondy K, Matten D, Moon J (2004) The Adoption of Voluntary Codes of Conduct in MNCs: a Three-Country Comparative Study *Business and Society Review* 109(4) 449-477

Bureau van Dijk Electronic Publishing (BvDEP) (2005) http://fame.bvdep.com/cgi/template.dll accessed 26.8.05

Bowker S, Tudor-Smith C (2000) The health-promoting school in Wales: an overview *Health Education* 100:4 154-160

Carroll AB (1999) Corporate Social Responsibility: Evolution of a Definitional Construct Business & Society 38:3 268-295

Carter S, Mason C, Tagg S (2004) Lifting the Barriers to Growth in UK Small Businesses: The FSB Biennial Membership Survey, 2004: Report to the Federation of Small Businesses Glasgow: Strathclyde Business School http://www.fsb.org.uk/documentstore/filedetails.asp?ID=38 Accessed May 2005

Cully M, Woodland S, O'Reilly A, Dix G (1999) Britain at Work London: Routledge

Dahlgren G, Whitehead M. (1991) *Policies and strategies to promote social equity in health* Stockholm: Institute of Futures Studies

Dillman DA (2000) Mail and Internet Surveys: The Tailored Design Method New York: Wiley

Dippo CS, Chun YI, Sander J (1995) 'Designing the Data Collection Process' in Cox BG, Binder DA, Chinnappa BN, Christianson A, Colledge MJ, Kott PS Eds. (1995) *Business Survey Methods* New York: Wiley

D& B (2000-2006) The DUNSRight™ Process: The Power Behind Quality Information http://dbuk.dnb.com/english/default.htm Accessed 27.1.06

Eco Schools Wales (undated) http://www.eco-schoolswales.org/English/home.htm Accessed 10.1.06

Elliott E, Williams G (2004) Developing a civic intelligence: local involvement in HIA Environmental Impact Assessment Review 24(2): 231-243

Environment Agency (2005) NetRegs: SME-nvironment 2005: Wales http://www.netregs.gov.uk/commondata/acrobat/2005 wales summary 1197389.pdf Accessed 10.1.06

Europa (2005) Corporate Social Responsibility: A business contribution to sustainable development http://europa.eu.int/scadplus/leg/en/lvb/n26034.htm accessed 15.10.05

Fraser BW (2005) Corporate Social Responsibility *The Internal Auditor* 62:1 42-47

Global Reporting Initiative (2002) *Sustainability Reporting Guidelines* Boston MA: Global Reporting Initiative

Goddard T (2004) Can corporate sector philanthropy be included in a new vision for community health programs? *Australian Occupational Therapy Journal* 51:106-109

Green Dragon (2005) http://greendragonems.com/english/index.asp Accessed 10.1.05

Griffiths G, Linacre S (1995) 'Quality Assurance for Business Surveys' in Cox BG, Binder DA, Chinnappa BN, Christianson A, Colledge MJ, Kott PS Eds. (1995) *Business Survey Methods* New York: Wiley

Hammann R (2003) Mining companies' role in sustainable development: the 'why' and 'how' of corporate social responsibility from a business perspective *Development Southern Africa* 20:2 237-254

Hartland J, Tudor-Smith C, Roberts C (1997) *Tackling Teenage Smoking through Smoke-free School Policies: The Welsh Situation* Health Promotion Wales Technical Report No. 23 Cardiff: Health Promotion Wales

Health Promotion Division, Welsh Assembly Government (2005) Fast Facts *The Standard:* Workplace Health News from Around Wales Issue 12

Health and Safety Executive (1992) Workplace Health, Safety and Welfare Regulations 1992: approved code of practice and guidance Sudbury: HSE Books

Idowu SO, Towler BA (2004) A comparative study of the contents of corporate social responsibility reports of UK companies *Management of Environmental Quality: An International Journal* 15:4 420-437

Jenkins H M (2004) Corporate Social Responsibility- Engaging SMEs in the Debate *New Academy Review* 3(3) pp. 76-95

Jones TM (1980) Corporate social responsibility revisited, redefined *California Management Review* 59-67 cited in Carroll AB (1999) Corporate Social Responsibility: Evolution of a Definitional Construct *Business & Society* 38:3 268-295

Joseph Rowntree Foundation (1999) *Evidence to the Low Pay Commission* http://www.jrf.org.uk/knowledge/responses/docs/lowpaycomm.asp Accessed 10.6.05

King's Fund (2004) Choosing Health? A consultation on improving people's health: King's Fund submission to the Department of Health.

Kompass (2005) 'About us' http://www.kompass.co.uk/info/hp_about_us.htm Accessed 27.1.06

kpmg.co.uk (2003) *Community Investment* http://www.kpmg.co.uk/about/csr_report/community/index.cfm Accessed 19.5.05

Krosnick JA, Alwin DF (1987) An Evaluation of a Cognitive Theory of Response-Order Effects in Survey Measurement Public Opinion Quarterly 51: 201-219

Leat D, Lethlean E (2000) *Trusts and foundations in Australia* Monograph#2. Melbourne: Philanthropy Australia Inc.

Lynn P, Sala E (2005) The *Impact of a Mixed Mode Data Collection Design on Non-Response Bias on a Business Survey* ISER working papers 2005-16, Institute for Social and Economic Research.

http://www.iser.essex.ac.uk/pubs/workpaps/pdf/2005-16.pdf accessed 31.7.06

National Assembly for Wales (2004) Size Analysis of Welsh Business, 2003 Cardiff: Welsh Assembly Government

Neath Port Talbot Online (2004) *Agenda 21* http://www.npt.gov.uk/agenda21/index.cfm Accessed 30.1.06

Paxson MC, Dillman DA, Tarnai J (1995) 'Improving Response to Business Mail Surveys' in Cox BG, Binder DA, Chinnappa BN, Christianson A, Colledge MJ, Kott PS Eds. (1995) *Business Survey Methods* New York: Wiley

Pietsch L (1995) 'Profiling Large Businesses to Define Frame Units' in Cox BG, Binder DA, Chinnappa BN, Christianson A, Colledge MJ, Kott PS Eds. (1995) *Business Survey Methods* New York: Wiley

Recycle Squad (undated) *Eco Schools* http://www.wasteawarenesswales.org.uk/kids/ecoSchools.html Accessed 12.1.06

Redline CD, Dillman DA (2002) 'The Influence of Alternative Visual Designs on Respondents' Performance with Branching Instructions in Self-Administered Questionnaires' in Groves RM, Dillman DA, Eltinge JL, Little RJA Eds. (2002) *Survey Nonresponse* New York: Wiley

Rhondda Cynon Taff County Borough Council (undated) http://www.rhondda-cynon-taff.gov.uk/stellent/groups/Public/documents/hcst/view content en.hcst?dDocName=001426 Accessed 12.1.06

Sigman RS, Monsour NJ (1995) Selecting Samples from List Frames of Businesses in Cox BG, Binder DA, Chinnappa BN, Christianson A, Colledge MJ, Kott PS Eds. (1995) *Business Survey Methods* New York: Wiley pp. 133-152

Smith C, Frankland J, Playle R, Moore L (1994) A survey of health promotion in Welsh Primary schools, 1993 *Health Education Journal* 53: 237-248

Tudor-Smith C, Roberts C, Parry-Langdon N, Bowker S (1997) A survey of health promotion in Welsh secondary schools, 1995 *Health Education* 97:6 225-232

United Nations Department of Economic and Social Affairs (2004) *Agenda 21* http://www.un.org/esa/sustdev/documents/agenda21/index.htm Accessed 10.1.05

Wales on the Web (undated) Sustainable Development in your Area http://www.walesontheweb.org/cayw/guides/en/131 Accessed 10.1.06

Welsh Assembly Government (2003) *Business and Environment Action Plan for Wales* Cardiff: Welsh Assembly Government http://www.businessenvironment.wales.gov.uk/documents/be-action-plan-e.pdf Accessed 30.1.06

Welsh Assembly Government (2000) *The Sustainable Development Action Plan 2004-2007* Cardiff: Welsh Assembly Government

Welsh Assembly Government (2003) *Review of Health and Social Care in Wales*. Cardiff: National Assembly for Wales.

Welsh Local Government Association (undated) *Sustainable Development* http://www.wlga.gov.uk/content.php?nID=170;IID=1 Accessed 10.1.06

Welsh Local Government Procurement Support Unit and Welsh Assembly Government (2004) Buying into Sustainable Development

http://www.wales.gov.uk/subieconomics/content/bettervalue/buying-sustainable-developmente.pdf Accessed 10.1.05

Williams P, Thomas A (2004) Sustainable development in Wales: Understanding effective governance York: Joseph Rowntree Foundation

Welsh Office (1998) Better Health, Better Wales London: The Stationery Office

World Health Organization (1997) *Jakarta Declaration on Health Promotion into the 21st Century* http://www.who.int/hpr/NPH/docs/jakarta_declaration_en.pdf Accessed 30.1.06

Wrexham County Borough Council (2006) Wrexham Local Health Alliance http://www.wrexham.gov.uk/english/community/local health alliance/ Accessed 10.1.05

6. Appendices

Appendix 1: Sample frames, sample selection and data collection

A1.1 Businesses

The FAME database (Bureau van Dijk 2005) was used to construct the sample frame of businesses with some activity in Wales and employing 50 or more people. FAME lists companies registered with Companies House. All registered office and trading addresses of 2,314 companies with activity in Wales were selected. This figure is considerably less than the National Assembly for Wales Statistical Directorate's estimate (National Assembly for Wales 2004) that there are 3,355 enterprises active in Wales, suggesting a large coverage error. A list of 5,716 addresses was compiled and five per cent of the addresses were selected. The criterion that businesses sampled should have 50 or more employees was applied to the business as a whole and not to individual trading addresses, where relatively few people might be employed.

The sample was stratified by National Public Health Service (NPHS) area and by size. When FAME lacked information about numbers of employees, it 'estimated' the number but only by including companies meeting the search criteria, not by providing a figure. Therefore although presumably they have 50+ employees, for some companies in the sample a more precise estimate of size is missing.

Using FAME to select companies with activity in Wales was possible only with the help of a search strategy devised by a member of staff in the Aberconway Guest library at Cardiff University. After downloading, the information required much editing before being sorted into three NPHS area lists. For example, charities, being companies limited by guarantee, were included; companies with activity in Shropshire; and many companies with similar names, e.g. Dwr Cymru (Holdings) Ltd. and Dwr Cymru Cyfyngedig. In these cases, only one name was selected for inclusion in the sample frame; however, selection was not systematic because of a lack of knowledge about the structure of the business. An article by Pietsch (1995) suggests that determining the organisational structure of large and complex businesses is a demanding task beyond the resources of the present study. Moreover, even with better information it is unlikely that the most appropriate address for a survey on health promotion would have been clearly identified.

Trading addresses were divided into three lists according to their location in Mid and West; North; and South East Wales Public Health Service (NPHS) areas and arranged in ascending order of size in each list. Where company size had been 'estimated' by FAME, addresses were placed in alphabetical order at the end of each list. A 5% sample, stratified by size and Public Health Service area, was selected by generating a random number between 0 and 10 to determine the first address to be chosen from each list and then selecting every twentieth subsequent address.

Because the addresses were first sorted into NPHS areas and then arranged in order of number of employees, the sample is not equivalent to 5% in each size category. The 'medium' size band in the sample is 4% and the 'estimated' size band is 10% of the numbers in the sample frame. In addition, possibly as a result of the difficulties of importing the data, three companies from South East Wales were included in the Mid and West Wales list, and one company from Mid Wales was put in the South Wales list. The number sampled from Mid and West Wales is therefore two less than it should have been, and the number sampled from South East Wales is two more. All the misplaced companies were large, and none of them returned questionnaires.

Tables A1.1 and A1.2 give details of the sample. (All percentages are rounded to the nearest whole number.)

Table A1.1: Number and percentage (of sample) of questionnaires posted to businesses, by NPHS area

Area	Number of trading addresses in sample frame	Total sampled (5%)	Total posted	% of sample posted
Mid and West Wales	1,969	97	95	98
North Wales	1,008	56	55	98
South East Wales	2,739	137	132	96
Total	5,716	290	282	97

Table A1.2: Number and percentage (of sample) of questionnaires posted to businesses, by size of business

Size of company	Number of trading addresses	Total sa	mpled	Number posted	% of sample posted
	in sample frame	Number	%		
Medium (50-249 employees)	1,438	61	4	60	98
Large (250+ employees)	4,011	202	5	195	96
Estimated	267	27	10	27	100
Total	5,716	290	5	282	97

The number of questionnaires for posting was reduced when businesses were telephoned to find out names of contacts. The reasons were:

- Duplicate missed during previous check (4)
- Company no longer trading (2)
- Manager declined to take part (1)
- Company did not have a trading address in Wales (1)

When reporting the results, the total number of questionnaires posted has been used as the effective sample size.

The proportions of the North Wales sample are most affected by the uneven sampling within the size categories, as Table A1.3 shows.

Table A1.3: Number and percentages* of questionnaires posted to businesses in each NPHS area, by size of business

		d West lles	North	Wales	South Ea	st Wales	То	tal
	n	%	n	%	n	%	n	%
Medium (50-249 employees)	21	22	10	18	29	22	60	21
Large (250+ employees)	66	69	38	69	91	69	195	69
Estimated	8	8	7	13	12	9	27	10
Total	95	100	55	100	132	100	282	100

^{*} Percentages do not add up to 100 for Mid and West Wales, due to rounding.

However, Table A1.4 shows that for the businesses where numbers of employees were known, the size range was similar but the mean size of companies in North Wales was substantially greater than in the other two NPHS areas. A colleague in the Business School at Cardiff University suggested that larger businesses may be more likely to respond to a survey because smaller ones consider they cannot spare the time and do not see any value in replying. The response rates for the three areas give no evidence for disagreement with this view.

Table A1.4: Means and standard deviations of company size (measured by number of employees) of sample businesses, by NPHS area

NPHS area	n	Mean	Std. Deviation
Mid and West	87	12,720	29,733
North	48	17,485	37,021
South East	120	12,421	28,834

A1.2 Schools

A1.2.1 Primary schools

A list of the names, addresses and numbers of pupils of all primary schools in Wales, was obtained from the Welsh Assembly Government following a signed undertaking from the Chief Investigator that the data would be used only for the current survey. The names of head teachers and telephone numbers were added from information available on the web. Schools were divided into three lists according to their location in Mid and West; North; and South East Wales Public Health Service (NPHS) areas and arranged in ascending order of size in each list. A 10% sample, stratified by size and Public Health Service area, was selected by generating a random number between 0 and 10 to determine the first school to be chosen from each area and then selecting every tenth subsequent school.

A1.2.2 Secondary schools

A list of all secondary schools in Wales was obtained from the Welsh Assembly Government as above. The total number of schools sampled, by Public Health Service area, is shown in Table 5.

Table A1.5: Number of schools included in the survey, by Public Health Service area

	Mid and West	North	South East	Total
Primary schools (10% sample)	60	42	55	157
Secondary schools	78	52	94	224
Total	138	94	149	381

A1.2.3 Local government

One council leader had participated in the interview stage of the evaluation and did not wish to be included in the survey. Therefore the number of the local government sample was reduced to 21. Contact details for local authorities, council members and staff were available from the internet.

A1.3 Data collection

There were four stages of the survey of schools and businesses:

- 1. Initial mailing of questionnaires to the whole sample
- 2. Reminder postcards sent to the whole sample approximately a week after the initial mailing
- 3. Replacement questionnaires posted to 10% of non-respondents
- 4. Telephone follow-up of 10% of non-respondents excluding those receiving replacement questionnaires

The third stage (replacement questionnaires) was not included in the survey of local authorities but all non-respondents were followed up by telephone. These four contacts followed a plan in Dillman (2000 p. 151) based on the principle that using stimuli which are different from previous contacts is more effective than repeating something that has been done already. Wording of covering letters and postcards was modelled on examples given by Dillman and was varied slightly to ensure it was appropriate for each group of recipients. Letters and postcards were written in both English and Welsh.

A1.3.1 Initial mailing

Papers posted to each organisation were:

- Questionnaire
- Covering letter

- Information sheet
- · Form for contact details
- Freepost envelope for return

These were placed in an A4 envelope and sent by second-class post paid through the University's franking machine.

The wording of covering letters was modelled on examples in Dillman (2000) and adapted according to the group addressed. Most covering letters accompanying the questionnaires were addressed to named individuals. Some organisations were contacted by phone to find out the names of individuals to whom questionnaires could be addressed. For schools, it was possible to address all but nineteen questionnaires to named head teachers. However, it was more difficult to identify names of potential respondents in businesses and 102 questionnaires were addressed to 'The Manager'. Reasons why names were not obtained were:

Phone calls for the business were directed through a call centre (29)

No answer (33)

Manager's name not known (2)

Requested to address questionnaire to 'The Manager' (6)

No manager at time of call (2)

Refusal to give out manager's name (2) (Data Protection -1; asked to call back when manager was in -1)

Number not available (7)

Request to send to Head Office (4)

Fax number (2)

Manager refused to take part in survey (1)

The amount of time allowed for phoning organisations was not sufficient to contact all businesses for whom the name of the proposed recipient was unknown; for obtaining names via call-centre numbers; or for repeat attempts to obtain information.

An identification number was assigned to each name and address in the sample frame; questionnaires were labelled with the identification number so that respondents' details could be removed from the sample frame when questionnaires were returned.

A1.3.2 Reminder postcards

Approximately a week after the initial mailing, reminder postcards were sent to all the organisations included on the original mailing list.

A1.3.3 Replacement questionnaires

Replacement questionnaires were posted to a 10% sample of non-respondents from businesses and schools using a covering letter with a more 'insistent' tone as suggested by Dillman (2000).

A1.3.4Telephone follow-up

The initial aim of the telephone follow-up was to ascertain the reasons for non-response to previous contacts. A random sample of 10% of non-respondents from businesses and schools and all non-respondents from local authorities were included.

A schedule of questions was designed as follows:

- a cover sheet for recording contact details and dates, times and number of calls made.
 This was designed to be separated from the rest of the questionnaire after contact had been made.
- Questions 4-6 to discover whether the person contacted was in a position to say why the questionnaire had not been returned.
- Questions 7-12 to elicit reasons for non-response and suggestions about what would encourage response
- Questions 13-20 asking about involvement in and knowledge of health-promotion initiatives – to investigate whether non-respondents had different characteristics from respondents
- Questions 20-21 Thanks and query regarding future contact
- Section 22 Interviewer asked to record mood of respondent. This was modelled on a
 question in the Small Business Survey (Carter, Mason and Tagg 2004) and intended to
 find out whether contacts minded being followed up with a phone call.

The people contacted were given the opportunity to finish the call at Question 12 or to skip Questions 16 and 17. All the questions could be answered in about five minutes.

Follow-up calls to schools and businesses were made by a researcher and a member of the clerical staff followed up local council leaders. Time spent on each follow up was as follows:

Businesses (23) 4 hours 15 minutes

Schools (8 primary, 12 secondary) 3 hours

Local authorities (19) 4 hours 30 minutes

Posting of replacement questionnaires and commencing the telephone follow-up (stages 3 and 4) were intended to take place approximately a month after the initial mailing. This was done in the business and local government surveys. However, these stages were delayed in the schools survey. Because of a difficulty with the Freepost licence, there was a period of about five weeks from the end of September 2005 during which the Royal Mail did not deliver returned questionnaires. Selection of follow-up samples was delayed until the Royal Mail had resumed deliveries so that schools which had returned questionnaires could be removed from the sample frame.

Follow-up questionnaires were posted and telephone follow-up was commenced for primary and secondary schools during the weeks beginning 14 and 21 November – approximately two months after the initial mailing. Table 6 shows posting dates and the dates of the telephone follow-up for businesses, schools and local authorities.

Table A1.6: Dates of survey stages: business, schools and local authorities

	First questionnaires	Reminder postcards	Replacement questionnaires	Telephone follow-up
Business	26.8.05	2.9.05	27.9.05	31.10.05 to 6.12.05
Schools	Week beginning 19.9.05	Week beginning 26.9.05	Week beginning 21.11.05	16.11.05 to 6.1.06
Local authorities	30.11.05	8.12.05	-	10.1.06 to 13.1.06

By 21st September, questionnaires and/or postcards sent to a total of 12 businesses (4% of sample) had been returned undelivered by the Royal Mail, indicating that the addressees had gone away. Phone calls were made to these companies and replacements posted to named managers at the correct addresses – except for one company which had no activity in Wales.

Appendix 2: Tables showing response rates for business, primary schools, secondary schools and local authorities by stages (Numbers and percentages)

Table A2.1: Response rates for the business survey by stages (Numbers and percentages)

percentages)							
Stages of the survey	N	%	%	%	%	%	%
1 st stage: initial posting							
Total eligible	282	100					
Questionnaires returned	32	11.3	100				
- After initial mailing (26.8.05)	11	3.9	34.4				
- After reminder postcards (2.9.05)	21	7.4	65.6				
No reply	250	88.6		100			
- Not active in Wales	1	0.3		0.4			
2nd stage: posting of replacement questionnaires (27.9.05)							
Follow-up sample	25	8.9		10.0	100		
Questionnaires returned	5	1.8		2.0	20.0		
No reply	20	7.1		6.1	80.0		
No reply and not followed up	220	78.0				100	
3rd stage: telephone follow-up (31.10.05 – 6.12.05)							
Total contacted	23	8.2				10.4	
Questionnaires completed	5	1.8				21.7	
Questionnaires not completed	18	6.4				73.9	100
Completed all follow-up questions	1	0.3					5.9
Completed initial follow-up questions	2	0.7					11.8
Offered to complete replacement questionnaires but did not return them	15	5.0					82.3
Overall							
Questionnaires returned	42	14.9					
Questionnaires not returned	240	85.1	100				
-Not active in Wales	1		0.3				

Table A2.2: Response rates for primary school survey by stages (Numbers and percentages)

percentages							
Stages of the survey	N	%	%	%	%	%	%
1 st stage: initial posting (19.9.05)							
Total eligible	158	100					
Questionnaires returned	75	47.5	100				
No reply	83	52.5		100			
2nd stage: posting of replacement questionnaires (21.11.05)							
Follow-up sample	10	6.3		12.0	100		
Questionnaires returned	5	3.2		5.9	50		
No reply	5	3.2		5.9	50		
No reply and not followed up	73	46.2				100	
3rd stage: telephone follow-up (16.11.05 – 6.1.06)							
Total contacted	8	5.1				10.9	
Questionnaires completed	2	1.3				2.7	
Questionnaires not completed	6	3.8				8.2	100
Completed all follow-up questions	2	1.3					33
Completed initial follow-up questions	1	0.6					16.7
Offered to complete replacement questionnaire but did not return it	1	0.6					16.7
Unable to answer any questions	2	1.3					33
Overall							
Questionnaires returned	82	52.0					
Questionnaires not returned	76	48.1	100				

Table A2.3: Response rates for secondary school survey by stages (Numbers and percentages)

Stages of the survey	N	%	%	%	%	%	%
1 st stage: initial posting (19.9.05)							
Total eligible	224	100					
Questionnaires returned	82	36.6	100				
No reply	142	63.3		100			
2nd stage: posting of replacement questionnaires (21.11.05)							
Follow-up sample	14	6.25		9.9	100		
Questionnaires returned	3	1.3		2.1	21.4		
No reply	11	4.9		7.7	78.6		
No reply and not followed up	128	57.1				100	
3rd stage: telephone follow-up (16.11.05 – 6.1.06)							
Total contacted	12	5.4				9.4	
Questionnaires completed	2	0.9				1.6	
Questionnaires not completed	10	4.5				7.8	100
Completed all follow-up questions	2	0.9					20
Completed initial follow-up questions	2	0.9					20
Offered to complete replacement questionnaire but did not return it	2	0.9					20
Other	1	0.4					10
Unable to contact appropriate spokesperson	3	1.3					30
Overall							
Questionnaires returned	87	38.8					
Questionnaires not returned	137	61.2	100				

Table A2.4: Response rates for local government by stages (Numbers and percentages)

Stages of the survey	N	%	%	%	%
1 st stage: initial posting					
Total eligible	21	100			
Questionnaires returned	2	9.5	100		
- After initial mailing (30.11.05)	1	4.8	50		
- After reminder postcards (8.12.05)	1	4.8	50		
No reply	19	90.5		100	
2nd stage: telephone follow-up					
Total contacted	19	90.5		100	
Questionnaires completed	1	4.8		5.3	
Questionnaires not completed	18	85.7		94.7	100
Completed all follow-up questions	3	14.3			16.7
Completed initial follow-up questions	0	0			0
Offered to complete replacement questionnaires but did not return them	0	0			0
Unable to contact appropriate spokesperson	15	71.4			83.3
Overall					
Questionnaires returned	3	14.3			
Questionnaires not returned	18	85.7	100		

Appendix 3: Estimated costs of data collection: businesses, schools and local government

Table A3.1: Estimated costs of data collection: business survey

Event	Unit cost (£)	First mailing and reminder		Dealing with items returned undelivered			questionnaires		Telephone follow-up	
		Number of units	Total cost (£)	Number of units	Total cost (£)	Number of units	Total cost (£)	Number of units	Total cost (£)	
Send questionnaire by post	0.55	282	155.10			25	13.75	20	11.00	179.85
Receive questionnaire by post	0.67	32	21.44			5	3.35	5	3.35	28.14
Send postcards	0.25	282	70.50							70.50
Make phone call	0.20			12	2.40			50	10.00	12.40
1 hour researcher time	28.00			3	84.00			4.25	119.00	
Total			247.04		86.40		17.10		143.35	290.89
Number sampled					282		25		23	
Cost per sample unit					1.18		0.68		6.23	
Number responding					32		5		5	
Cost per response					10.42		3.42		28.67	

Table A3.2: Estimated costs of data collection: survey of primary schools

Event	Unit cost (£)	First mailir reminder	ng and	Dealing wireturned undelivere			questionnaires		Telephone follow-up	
		Number of units	Total cost (£)	Number of units	Total cost (£)	Number of units	Total cost (£)	Number of units	Total cost (£)	
Send questionnaire by post	0.55	158	86.90			10	5.50	3	1.65	94.05
Receive questionnaire by post	0.67	75	50.25			5	3.35	2	1.34	54.94
Send postcards	0.25	158	39.50							39.50
Make phone call	0.08							19	1.52	1.52
1 hour researcher time	28.00							1	28.00	28.00
Total			176.65				8.85		32.51	218.01
Number sampled			158				10		8	
Cost per sample unit			1.12				0.88		4.06	
Number responding			75				5		2	
Cost per response			2.35				1.77		16.25	

Table A3.3: Costs of data collection: survey of secondary schools

Event	Unit cost (£)	First mailing and reminder		Dealing with items returned questionna undelivered			Telephone follow-up		Total (£)	
		Number of units	Total cost (£)	Number of units	Total cost (£)	Number of units	Total cost (£)	Number of units	Total cost (£)	
Send questionnaire by post	0.55	224	123.20			14	7.70	4	2.20	133.10
Receive questionnaire by post	0.67	82	54.94			3	2.01	2	1.34	58.29
Send postcards	0.25	224	56.00							56.00
Make phone call	0.08							51	4.08	4.08
1 hour researcher time	28.00							2	56.00	56.00
Total			234.14				9.71		63.62	307.47
Number sampled			224				14		12	
Cost per sample unit			1.04				0.69		5.30	
Number responding			82				3		2	
Cost per response			2.85				3.24		31.81	

Table A3.4: Costs of data collection: local government survey

Event	Unit cost (£)	First mailing and reminder		Dealing with items returned undelivered		Replacement questionnaires		Telephone follow-up		Total (£)
		Number of units	Total cost (£)	Number of units	Total cost (£)	Number of units	Total cost (£)	Number of units	Total cost (£)	
Send questionnaire by post	0.55	21	11.55					1	0.55	12.10
Receive questionnaire by post	0.67	2	1.34					1	0.67	2.01
Send postcards	0.25	21	5.46							5.46
Make phone call	0.23							40	9.20	9.20
1 hour researcher time	28.00							1	28	28.00
1 hour clerical staff time	6.8004							4.5	30.60	30.60
Total			18.35						69.02	87.37
Number sampled			21						19	
Cost per sample unit			0.87						3.63	
Number responding			2						1	
Cost per response			9.17						69.02	

Appendix 4: Participation by schools and businesses in Welsh Assembly health-promotion initiatives

Table A4.1: Numbers of businesses participating in Welsh Assembly health-promotion initiatives

	Took part in last 12 months	Has not taken part	Not answered	Total
No Smoking Day	5	14	1	20
Fit In Campaign	0	19	1	20
National Bike Week	0	19	1	20
Sportsmatch Cymru	0	19	1	20
Workplace Travel Plan	1	18	1	20

Table A4.2: Numbers of primary schools participating in Welsh Assembly healthpromotion initiatives

	Took part	Plans to	Has not	Not answered	Total
	in last 12	take part in	taken part		
	months	next 6 mths	•		
All Wales Schools	62	2	4	5	73
Police Liaison					
Programme					
Dragon Sport	60	3	7	3	73
PE and School Sport	50	1	13	9	73
Programme					
Circle Time Initiative	45	3	14	11	73
The Class Moves!	44	3	18	8	73
Fruit Tuck Shop	44	6	18	5	73
Welsh Network of	36	2	27	8	73
Healthy School					
Schemes					
ECO Schools	35	8	20	10	73
Think Water	34	2	26	11	73
Smoke Bugs!	32	2	29	10	73
The Health Promoting	32	7	24	10	73
Playground		_			
Safe Routes to	31	5	28	9	73
School	40	0	00	40	70
No Smoking Day	18	0	39	16	73
National Bike Week	18	2	41	12	73
Teaching Awards –	15	1	41	16	73
Health Promoting School Category					
Teacher Support	6	2	45	20	73
Cymru	O	2	45	20	73
Fit In Campaign	4	0	49	20	73
Workplace Travel	4	4	50	15	73
Plan	-	4	30		13
National Assembly	4	7	49	13	73
Free School		•			
Breakfasts Initiative					
Playground initiative	4	2	51	16	73
'In the Zone'					

Table A4.3: Numbers of secondary schools participating in Welsh Assembly healthpromotion initiatives

	Taken part in last 12 months	Plans to take part in next 6 months	Has not taken part	Not answered	Total
All Wales	62	2	8	10	82
Schools		_			-
Police					
Liaison					
Programme					
No Smoking	59	2	5	16	82
Day					
PE and	55	0	7	20	82
School Sport					
Programme					
Smokefree	51	1	11	19	82
Class					
Competition					
Think Water	49	8	10	15	82
Welsh	45	7	15	15	82
Network of					
Healthy					
School					
schemes		_			
ECO Schools	36	8	21	17	82
Circle Time	27	0	32	23	82
Initiative		_			
Safe Routes	24	5	29	24	82
to School				22	
National Bike Week	15	1	36	29	82
Teaching	13	5	37	27	82
Awards -					
Health					
Promoting					
School					
Category	_	4	40	00	00
Fit In	7	1	42	32	82
Campaign	-	4	40	20	00
Teacher	5	1	40	36	82
Support					
Cymru Workplace	3	2	44	33	82
Travel Plan			44	33	02
Soil	0	2	45	35	82
Association		_	45	35	02
School Food					
Awards					
Awaius	<u> </u>				

Appendix 5: Local health promotion initiatives: participation by primary and secondary schools

Exercise

Primary schools:

- Dancing/swimming gala
- Jump Rope Wales
- Jump Rope for Heart (2)
- Local sports gala
- --- Rugby Club linked to Healthy School Week
- Race of the Chair, sports activities with the Urdd
- Walk to School Week
- Walk to School (2)
- Skipalong
- Walking Bus
- 30, 40, 50 (walk or run mile)

Secondary schools:

- Fitness First LEA
- Female sport with --- Community First
- Healthy activity days 2 days in July 2005
- Introductory skipping scheme
- Dancing with a hoola-hoop
- Set up a school cycling club

2. Healthy Eating

Primary schools:

- Free fruit during holidays by --- (local store)
- Healthy Eating days
- Healthy lunch box initiatives
- Hygiene in kitchen, menus checked and cook involved in food projects/cooking with children and café project
- Tuck Shop
- Warburtons Healthy Sandwich Workshops

Secondary schools:

- School meals
- Healthy fruit drinks
- Enterprise to promote healthy eating in school
- Healthy eating campaign
- Healthy eating conference
- Healthy eating initiative school meals
- Healthy Food initiatives

- --- Catering who provide our school meals service introduced Healthy Eating 3 years ago
- Breakfast club
- FUW, Educating Tour of Healthy eating
- School Nutrition Action Group

Other initiatives

Primary:

- Happy Heart Week
- Heartstart Wales (2)
- Heart Foundation
- National Stroke Day
- Kerbcraft
- Sun safety
- St. John Ambulance

Secondary:

Sexual health education was mentioned by four respondents:

- Training in social education, for example sex education
- Sexual Health annual course run by community nurses to Year 10 for the last 10 years
- Training in "Girls Out Loud"
- 'STD'

Other initiatives:

- Anti Smoking Campaign, run by teacher
- Local Health Board No Smoking Group
- Heartbeat Wales and in-house successor
- LEA Transport Dept. Drama
- Peer tutoring drugs programme led by Health Promotion Unit and police
- Drugs Awareness
- Whole School issues
- Duke of Edinburgh
- SRE Project
- Binge drinking "drama" pilot
- Chiropractic advice heavy bags
- Communities First Health and Well Being Focus Group
- DnA Police workshops
- Health fairs various providers from Local Authority
- Health fairs
- Lifestyle Change promotions
- Healthy Living Conference supported by NFU and Soil Association

Appendix 6: UK/international health-promotion initiatives: participation by primary and secondary schools

1. Primary schools:

- NSPCC Fair Play Games
- Cancer Research Genes for Jeans
- Cancer Research
- British Heart Jump for heart
- Heart Foundation Skipping Races and Activities
- Jump Rope for Heart BHF
- Jump to your heart
- Skip for Life Fundraiser
- National Day 30/9 Running
- No Tobacco Day
- Operation Xmas Child
- Race for Life pupils, staff, parents and friends
- Race for Life staff members and some pupils
- Race for Life (2)
- Race for Life (staff) (3)
- Water Aid
- Wearing sun hats in summer

2. Secondary schools

- 'A number of initiatives'
- 'Against smoking/alcohol'
- Anti-bullying National Awareness Week October 05
- Anti-bullying week
- World Aids Day
- AIDS Day awareness
- World Aids
- Charity walk
- Cycling Week
- Fruity Friday
- Race for Life (9)
- Race for Life (staff) (3)
- Race for Life 2005
- Race for Life annually
- Race for Life organisers came into school and gave presentations Then Year 12/13 helped to marshal the event.
- Jump Rope for Heart
- Skipping to Health
- McMillan Coffee Morning
- McMillan Biggest Coffee Morning 30.9.05
- Heartstart, skipping, Love Heart Wales
- Jump Rope for Heart
- No Tobacco Day (2)
- World No Tobacco Day

- Tobacco Action Group
- Breast Cancer
- Breast Cancer Awareness
- Jeans for Genes
- Skipathon
- Smoke Free Environment
- Green/Amber/Red Healthy Eating