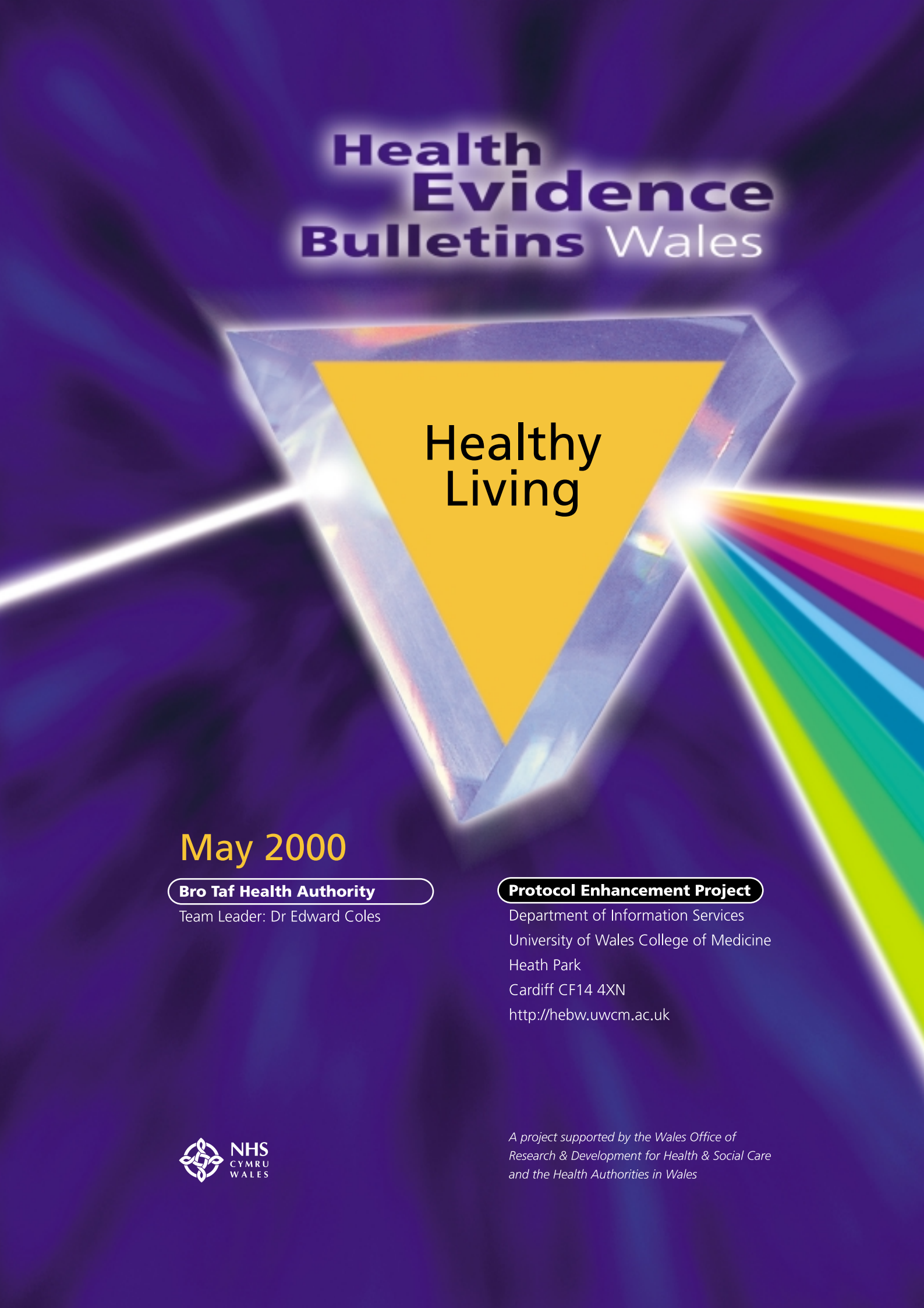
Health Evidence Bulletins Wales



Healthy Living

May 2000

Bro Taf Health Authority

Team Leader: Dr Edward Coles

Protocol Enhancement Project

Department of Information Services
University of Wales College of Medicine
Heath Park
Cardiff CF14 4XN
http://hebw.uwcm.ac.uk

NHS CYMRU WALES

A project supported by the Wales Office of Research & Development for Health & Social Care and the Health Authorities in Wales

Director of Public Health (with responsibility for the Healthy Living Bulletin):
Dr Sharon Hopkins, Bro Taf Health Authority

Authors:
Dr Edward Coles (Team Leader), Directorate of Public Health and Policy, Bro Taf Health Authority
Dr Julie Bishop, Directorate of Public Health and Policy, Bro Taf Health Authority
Ms Virginia Blakey, Health Promotion Division, National Assembly for Wales
Dr Dyfed Wyn Hughes, Directorate of Public Health and Policy, Bro Taf Health Authority
Ms Cathy Weatherup, Welsh Drug and Alcohol Unit, Cardiff
Dr Alison Weightman, Department of Information Services, University of Wales College of Medicine

The authors gratefully acknowledge the contributions of **Dr Steve Rollnick** to the 'Smoking' chapter and **Dr Nicholas Phin** to the 'Being a carer' chapter.

The Health Evidence Bulletins Wales are funded by the Health Authorities in Wales

The format of this bulletin was devised by Dr C Riley and Mrs J Barker of the Clinical Effectiveness Support Unit, Llandough and Dr AL Weightman of the Department of Information Services, University of Wales College of Medicine, Cardiff.

Health Evidence Bulletins Wales
Department of Information Services
University of Wales College of Medicine
Cardiff CF14 4XN
Tel: 029 2074 5142 Fax: 029 2074 3574
E-mail: WeightmanAL@cardiff.ac.uk
Web sites: http://hebw.uwcm.ac.uk (world wide)
http://cymruweb.wales.nhs.uk/hebw
(Wales only)

This Bulletin should be cited as: Health Evidence Bulletins Wales: Healthy Living. Cardiff: National Assembly for Wales, 2000. ISBN: 0 7504 2285 8

CONTENTS

Introduction

The original *Protocols for Investment in Health Gain* were written in the early 1990s to suggest areas where the introduction, or more widespread use, of certain practices could lead to worthwhile improvements in health for the people of Wales. The documents also highlighted current practices that were of questionable value. This revision has been prepared by reviewing the earlier *Protocol for Investment in Health Gain: Healthy Living*[1] to provide some clear, updated statements with a precise indication of the sources for each statement; and to introduce new statements arising from the literature.

In keeping with the original Protocols, it should be stressed that this document is designed primarily for those who commission health services, but it should also be useful to health practitioners wishing to know which health promoting interventions and activities have been shown to have the greatest impact on the health of individuals and populations. It should be read by those in a position to affect government policy towards taxation and legislative action which can lead to a reduction in health-harming behaviour.

The original Healthy Living Protocol addressed the following areas:

- Coping and Relationships (parenting, childhood and adolescence, relationship breakdown/divorce, life events, psychological stress and loneliness, being in care, old age, being a carer, loss and bereavement);
- Violence and Abuse (abuse of children, violence among adults, sexual violence among adults);
- Sexual Health Problems (general, unwanted pregnancies, infertility, psychosexual problems, menopause problems, sexually transmissible diseases, HIV/AIDS), problems linked to misuse of alcohol, problems linked to misuse of illicit drugs, problems linked to misuse of prescription and over the counter drugs, problems linked to misuse of volatile substances.

In the context of commissioning services for the NHS in the new century, and utilising the utilitarian principle of the greatest good to the greatest number, the Steering Group agreed that this Bulletin should concentrate on the following topics:

- Smoking;
- Alcohol misuse;
- Food and health;
- Unintended teenage pregnancy;
- Sexually transmitted infections;
- Being a carer.

The statements represent a methodical summary of the evidence in this area found through formal literature searches across a wide range of sources. The evidence has been critically appraised in a way that is appropriate for interventions that aim to promote healthy living, compiled into this document under the leadership of a public health physician and reviewed by a team of experts[2].

Given the wide range of factors in society and the environment that impact on health and health-determining behaviour, and the complex nature of human motivation and actions, it is difficult to identify a simple causal chain which links a health promotion activity to changes in health status. It is therefore often inappropriate to use health status outcomes as primary measures of the success of health promotion intervention*. Instead, such evaluation has to be based on measurement of change in intermediate outcomes such as:

- achievement of improved personal “health literacy”;
- changes to public policies and organisational practices;
- changes to social norms and community actions that increase people’s control over the determinants of their health.

For interventions designed to influence human behaviour and social interactions at the population level, classical experimental designs such as the randomised controlled trial are often impractical. They can place unrealistic restraints on the design of the intervention and make it impossible to manage that intervention (for example, in respect of the use of community networks) in ways that do not compromise the activity. It is also extremely difficult to maintain over the long time period often required for the measurement of changes in behaviour, organisational structures and social norms[3]. Other, complementary, research methods are therefore often used, such as qualitative ones, which can provide insights into people’s experiences and into the social contexts that strengthen, support or diminish health and health-determining behaviour[4].

*For a further discussion on evaluating health promotion activities see the Health Education Board for Scotland’s *Research for a Healthier Scotland.* Edinburgh: Health Education Board for Scotland, 1999. http://www.hebs.scot.nhs.uk/research/strat/index.htm [accessed 1.6.00]

The convention used in this document to indicate the type of **evidence** is [5]:

'Type I evidence' - at least one good systematic review (including at least one randomised controlled trial)
'Type II evidence' - at least one good randomised controlled trial
'Type III evidence' - well designed interventional studies without randomisation
'Type IV evidence' - well designed observational studies
'Type V evidence' - expert opinion; influential reports and studies

The health gain notation (used to indicate the potential **benefit** to health) is[6]:

'beneficial' - effectiveness clearly demonstrated (1)
'likely to be beneficial' - effectiveness not so firmly established (2)
'trade-off between beneficial and adverse effects' - effects weighed according to individual circumstances(3)
'unknown'- insufficient/inadequate for recommendation(4)
'unlikely to be beneficial' - ineffectiveness is not as clearly demonstrated as for 6 (5)
'likely to be ineffective or harmful' - ineffectiveness or harm clearly demonstrated (6)

It should be stressed that these gradings, while aiming to be impartial, represent only the best advice of the professionals involved in preparing the Bulletin.

Despite the difficulties of obtaining and assessing evidence, there are a number of clear relationships between lifestyle factors and adverse health outcomes. In many of these, a plausible causative link can be established. What is more, it can be shown that altering some of these lifestyle factors can lead to a better health outcome. Other Bulletins in this series, for example those on cardiovascular diseases, respiratory diseases and cancers, give details of the harm caused by many of the factors considered here. This Bulletin concentrates on the actions that have been shown to be effective (or not) in producing change towards healthy living.

The project team sought evidence to answer each of the following questions:

- Which environmental exposures cause harm to health?
- What type of adverse health effects may result?
- Are there effective environmental interventions that have been shown to reduce harm or promote health?

Published studies on environment and health are concerned almost exclusively with linking environmental factors with the aetiology of disease. Much of the evidence evaluated is therefore drawn from observational studies rather than randomised trials. Systematic reviews and meta-analyses were used where they exist.
However, there is a dearth of well-designed research evaluating the health impact of environmental interventions. This imbalance is therefore reflected in the range of statements made in the Bulletin.

1. Welsh Health Planning Forum. *Protocol for Investment in Health Gain. Healthy Living.* Cardiff: Welsh Office, 1993

2. Barker J, Weightman AL and Lancaster J. *Project for the Enhancement of the Welsh Protocols for Investment in Health Gain; Project Methodology 2*. Cardiff: Duthie Library UWCM, 1997. http://hebw.uwcm.ac.uk/method/index.html [accessed 6.4.00 – Project Methodology 3 now available]

3. Speller V, Learmonth A, Harrison D. The search for evidence of effective health promotion. *British Medical Journal* 1997; **315**: 361-363

4. Greenhalgh T, Taylor R. Papers that go beyond numbers (qualitative research). *British Medical Journal* 1997; **315**: 740-743

5. This table is adapted from the Bandolier system (derived from the work at McMaster University, Canada) using the NHS Centre for Reviews and Dissemination criteria for a systematic review. See reference 2 or http://www.jr2.ox.ac.uk/Bandolier/band6/b6.5.html and the Database of Abstracts of Reviews of Effectiveness (DARE) in the Cochrane Library.

6. This notation is modified from the tables used in Enkin M, Kierse MJNC, Renfrew M and Neilson J. *A Guide to Effective Care in Pregnancy and Childbirth.* 2nd ed. Oxford: Oxford University Press, 1995. pp. 389-390.

1 SMOKING

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

Smoking is the single greatest cause of preventable illness and premature death in the UK, causing 120,000 deaths each year[i].

i. Callum C. *The UK Smoking Epidemic: Deaths* in 1995. London: Health Education Authority, 1998
(Type IV evidence – statistics)

The *statements*	The *evidence*

1.1 Background

1.1a. The British Doctors Study estimated the **relative risk of dying** from lung cancer as 14.9 in smokers compared to non-smokers, from chronic obstructive pulmonary disease 12.7, from ischaemic heart disease 1.6, cerebral thrombosis 1.3, cerebral haemorrhage 1.4 and from aortic aneurysm 4.1. For most of the causes of death, the relative risk rises with the number of cigarettes smoked and the duration of smoking[i].

i. Doll R, Peto, R, Wheatley, Gray R, Sutherland I. Mortality in relation to smoking: 40 years' observations on male British doctors. *British Medical Journal* 1994; **309**: 901-911
(Type IV evidence – very large cohort study with long-term follow up)

1.1b. **Excess death rates,** in smokers compared to non-smokers, were observed for cancers of the mouth, oesophagus, pharynx, larynx, lung, pancreas, and bladder; from chronic obstructive pulmonary disease and other respiratory diseases; from ischaemic heart disease, stroke and other vascular diseases; and peptic ulcers. Most of these associations are thought to be causal in part[i].

i. Doll R, Peto, R, Wheatley, Gray R, Sutherland I. Mortality in relation to smoking: 40 years' observations on male British doctors. *British Medical Journal* 1994; **309**: 901-911
(Type IV evidence – very large cohort study with long-term follow up)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
1.1c. Environmental tobacco smoke (ETS, passive smoking) is a cause of lung cancer in never-smoking work colleagues, especially in women, and lung cancer and ischaemic heart disease in never-smoking spouses (especially women). ETS from parental smoking increases the risk of lower respiratory tract illness in infants. It worsens symptoms in children with asthma and increases the risk of pneumonia, bronchitis and bronchiolitis in children under 5. The risk increases with the number of smokers in the home[i].	**i.** Health Evidence Bulletins. *Health Evidence Bulletins-Wales: Healthy Environments.* Cardiff: Welsh Office, 1998 http://hebw.uwcm.ac.uk/healthyenvironments/Chapter5.html [accessed 3.3.00] (Summaries of evidence classified by evidence type)
1.1d. In the UK **cigarette consumption** is **25% higher than the EU average**, although smoking rates are similar to the EU average[i]. In 1996 the adult smoking rate was higher in Wales and Scotland (32%) than in Northern Ireland (29%) and England (28%)[i]. In Wales the proportion of 18-64 year olds who reported smoking daily fell from 32.5% in 1985 to 26.9% in 1996[ii].	**i.** *Smoking Kills - a White Paper on Tobacco.* Cm 4177. London: The Stationery Office, 1999 http://www.official-documents.co.uk/document/cm41/4177/4177.htm [accessed 3.3.00] (Type V evidence – expert opinion citing type IV evidence, statistics) **ii.** *Lifestyle Changes in Wales: Health in Wales Survey 1996.* Technical Report no 27. Cardiff: Health Promotion Wales, 1998 (Type IV evidence – large population based cross-sectional surveys with random samples)
1.1e. More than a quarter of **Welsh school girls** smoke at least once a week – more than in most European Union countries[i]. At all ages between 11 and 15, girls are more likely to smoke than boys, but boys who smoke consume more cigarettes than girls[ii].	**i.** World Health Organisation Europe. *The Health of Youth. A Report of the 1993/1994 Survey Results of Health Behaviour in School-Aged Children: A WHO Cross National Study.* Copenhagen:WHO, 1996 (Type IV evidence – survey of European countries) **ii.** Office for National Statistics. *Young Teenagers and Smoking in 1997.* London: Office for National Statistics, 1998 (Type IV evidence – qualitative and quantitative observational study)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
1.1f. Most smokers (82%) **start** during their **teenage years**[i]. The peak age of taking up smoking is 14 to 16 years in boys and girls with a change in attitude and behaviour generally occurring at 13 years. After age 20 very few people take up smoking[ii].	**i.** Thomas M, Walker A, Wilmot A, Bennett N, Office for National Statistics. *Living in Britain: Results from the 1996 General Household Survey.* London: The Stationery Office, 1998 (Type IV evidence – large survey) **ii.** Townsend J. The burden of smoking. In: Benzeval M, Judge K, Whitehead M (editors). *Tackling Inequalities in Health – An Agenda for Action.* London: Kings Fund, 1995 (Type V evidence – expert opinion citing type IV evidence, survey)
1.1g. High smoking prevalence occurs in the **most disadvantaged groups.** Both men and women in lower socio-economic groups have responded less to past health publicity of the dangers of smoking than those in higher socio-economic groups[i].	**i.** Townsend J, Roderick P, Cooper J. Cigarette smoking by socioeconomic group, sex, and age: effects of price, income and health publicity. *British Medical Journal* 1994; **309**: 923-7 (Type V evidence – expert opinion summarising type IV evidence, observational studies)
1.1h. Very high smoking prevalence occurs in **young married couples** below 24 years with children, and especially in **lone mothers.** Multiple disadvantage makes matters worse and smoking prevalence of 70% has been reported in lone parents with low incomes, no educational qualifications, and living in council housing[i].	**i.** Townsend J. The burden of smoking. In: Benzeval M, Judge K, Whitehead M (editors). *Tackling Inequalities in Health – An Agenda for Action.* London: Kings Fund, 1995 (Type V evidence – expert opinion citing type IV evidence, surveys)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

1.1i. **Young people whose parents smoke** are **twice as likely to smoke** as children of non-smoking parents[i,ii]. Those who perceive no parental disapproval are seven times more likely to smoke than young people who perceive strong parental disapproval. Young people with a sibling who smokes are up to four times more likely to smoke than those whose siblings do not smoke. In addition the prevalence of smoking among young people is higher in those living with a single parent and is higher still if the lone parent smokes[iii,iv] .

The *evidence*

i. Office for National Statistics. *Young Teenagers and Smoking in 1997*. London: Office for National Statistics, 1998
(Type IV evidence – statistics)

ii. *Report of the Scientific Committee on Tobacco and Health.* London: The Stationery Office, 1998
(Type V evidence – expert opinion based on type IV evidence citing: *Why children start smoking. An enquiry carried by Social Survey Division of OPCS on behalf of the Department of Health.* London: The Stationery Office, 1990)

iii. Pierce JP, Gilpin EA, Emery SL, White MM, Rosbrook B, Berry CC. Has the Californian tobacco control program reduced smoking? *Journal of the American Medical Association* 1998; **280**: 893-9.
(Type IV evidence – summary of observational study)

iv. Royal College of Physicians. *Smoking and the Young. A Report of the Working Party of the Royal College of Physicians.* London: Royal College of Physicians, 1992
(Type V evidence – expert opinion based on type IV evidence, observational studies)

1.1j. The **effect of peer smoking** is important and more pronounced with increasing age[i,ii]. Whilst self-image, social representation and social identity are important factors in the uptake and continuation of smoking, the use of tobacco is affected by the wider environment more than by such individual factors[iii]. Qualitative research suggests that health-damaging behaviours can enable people to cope under difficult circumstances[iv].

i. Pierce JP, Gilpin EA, Emery SL, White MM, Rosbrook B, Berry CC. Has the Californian tobacco control program reduced smoking? *Journal of the American Medical Association* 1998; **280**: 893-9.
(Type IV evidence – summary of observational study)

ii. Office for National Statistics. *Young Teenagers and Smoking in 1997*. London: Office for National Statistics, 1998
(Type IV evidence – surveys and qualitative studies)

iii. World Health Organisation Europe. *Social Determinants of Health: The Solid Facts.* Copenhagen: WHO, 1998
(Type V evidence – expert opinion citing type IV evidence, cohort, cross-sectional and qualitative studies)

iv. Benzeval M, Webb S. Family poverty and poor health. In: Benzeval M, Judge K, Whitehead M (editors). *Tackling Inequalities in Health – An Agenda for Action.* London: Kings Fund, 1995
(Type V evidence – expert opinion citing qualitative type IV evidence)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

1.2 Smoking prevention or cessation interventions at a societal level

1.2a. The real **price** of cigarettes influences **consumption** among **existing adult smokers**[i,ii]. Excise **tax** is a large component of cigarette price. For the population as a whole, cigarette consumption decreases by about 0.5% for a 1% increase in price, adjusted for inflation.

Several studies have demonstrated that the **uptake** of smoking by **young people** shows the highest price elasticity ('sensitivity' or 'responsiveness' to price)[iii,iv,] which is important in the long term given that most smokers start as young people. In New Zealand, a 17% increase in cigarette price as a result of **taxation** in July 1991 appeared to accelerate the smoking reduction effect of an advertising ban in December 1990[v].
(Health gain notation – 3 *"trade off between beneficial and adverse effects"*)

Caveat: Real cigarette price has an **unequal effect** on cigarette consumption among **socioeconomic groups.** In the most disadvantaged groups smoking rates have remained stable against a background of real price rises. Furthermore, real cigarette price has been shown to affect the living standards in poor households, where a higher proportion of disposable income is spent on tobacco. Low income households on income support where parents smoke lack more basic amenities than similar households where parents do not smoke. One study suggests that living in hardship is the main deterrent to quitting smoking[iii]. It is **unlikely that a cigarette price rise will increase smoking cessation in the most deprived households in Wales,** and the price rise may make cessation more difficult and be harmful to people in these groups[iii].

i. Godfrey C, Maynard A. Economic aspects of tobacco use and taxation policy. *British Medical Journal* 1988; **297**: 339-43
(Type V evidence – expert opinion based on type IV evidence)

ii. Townsend J, Roderick P, Cooper J. Cigarette smoking by socioeconomic group, sex, and age: effects of price, income, and health publicity. *British Medical Journal* 1994; **309**: 923-7
(Type IV evidence – ecological epidemiological evidence and economic data)

iii. Acheson D (Chair). *Independent Inquiry into Inequalities in Health.* London: The Stationery Office, 1998
(Type V evidence – expert opinion based on a systematic review of type IV and econometric evidence)

iv. *Report of the Scientific Committee on Tobacco and Health.* London: The Stationery Office, 1998
(Type V evidence – expert opinion based on type IV evidence citing Diamond A, Goddard E. *Smoking Among Secondary School Children in 1994.* OPCS Social Survey Division. London: The Stationery Office, 1995)

v. *Report of the Scientific Committee on Tobacco and Health.* London: The Stationery Office, 1998
(Type V evidence – expert opinion based on type IV evidence citing New Zealand Ministry of Health. *Tobacco Statistics 1996.* Cancer Society of New Zealand)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

1.2b. There is evidence that **tobacco advertising and promotion** influences tobacco consumption[i]. Tobacco advertising and promotion helps to recruit young smokers[ii]. The cigarette brands smoked most by children are the most heavily advertised[iii,iv]. Boys whose favourite sport on television was motor racing had a 12.8% risk of becoming regular smokers compared to 7.0% for boys who did not follow it[v]. Past tobacco advertising campaigns targeted at young women were associated with a large rise in uptake of smoking by women younger than the legal age for cigarette purchase[vi].
(Health gain notation – 6 *"likely to be harmful"*)

The *evidence*

i. Godfrey C, Maynard A. Economic aspects of tobacco use and taxation policy. *British Medical Journal* 1988; **297**: 339-43
(Type V evidence – expert opinion based on type IV evidence)

ii. Department of Health, Department of Health and Social Security Northern Ireland, Scottish Office Department of Health, Welsh Office. *Report of the Scientific Committee on Tobacco and Health.* London: The Stationery Office, 1998 p.35
(Type V evidence - expert opinion based on some type IV qualitative, IV quantitative and other type V evidence)

iii. Foulds J, Godfrey C. Counting the cost of children's smoking. *British Medical Journal* 1995; **311**: 1152-4
(Type V evidence – expert opinion based on type IV evidence)

iv. *Smoking Kills - a White Paper on Tobacco*. Cm 4177. London: The Stationery Office, 1999
http://www.official-documents.co.uk/document/cm41/4177/4177.htm [accessed 10.1.00]
(Type V evidence – expert opinion based on type IV evidence citing Barron J. *Young Teenagers and Smoking in 1997*. London: Office for National Statistics, 1998)

v. *Report of the Scientific Committee on Tobacco and Health. London:* The Stationery Office, 1998 p.39
(Type V evidence - expert opinion)

vi. *Report of the Scientific Committee on Tobacco and Health.* London: The Stationery Office, 1998
(Type V evidence – expert opinion based on type IV evidence citing Pierce JP, Lee L, Gilpin EA. Smoking initiation by adolescent girls, 1944 through 1988: an association with targeted advertising. *Journal of the American Medical Association* 1994; **271**: 608-11)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
1.2c. Long-term ecological evidence from many different countries consistently shows that **tobacco advertising bans** are associated with reduced tobacco consumption. Bans in Norway (in 1975) and Finland were associated with a 9% and 7% reduction respectively, although when bans were introduced in Canada, Australia and New Zealand the reduction was less[i]. In particular, the Norwegian ban led to a substantial reduction in smoking in school students and adult men[ii]. In New Zealand heavy advertising before the ban in December 1990, was closely followed by a peak in smoking among 15 to 19 year olds in 1991 despite several preceding years of sharp decline. The peak declined by the second half of 1991. It is thought that the effect of an advertising ban interacts with concurrent measures on legislation, taxation, health promotion programmes and publicity campaigns[iii]. (Health gain notation – 1 *"beneficial"*)	*Report of the Scientific Committee on Tobacco and Health.* London: The Stationery Office, 1998 (Type V evidence – expert opinion based on type IV evidence) citing the following. **i.** Department of Health. *Effect of Tobacco Advertising on Tobacco Consumption: A Discussion Document Reviewing* London: Department of Health, 1992 **ii.** Kersler DA, Barnett PS, Witt A, Zeller MR, Mande JR, Schultz WB. The legal and scientific basis for the FDA's assertion of jurisdiction over cigarette and smokeless tobacco. *Journal of the American Medical Association* 1997; **277**: 405-9 **iii.** New Zealand Ministry of Health. *Tobacco Statistics 1996.* Cancer Society of New Zealand
1.2d. A Cochrane review is in progress on **community action for reducing smoking** among adults[i].	**i.** Secker-Walker R. Community action for reducing smoking among adults (Protocol). Cochrane Database of Systematic Reviews. *Cochrane Library* 1999 Issue 4 (Type I evidence – systematic review in progress)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
1.2e. **Mass media campaigns** can be effective in preventing the uptake of smoking in young people[i]. Campaigns were more effective when they had a theoretical basis, used formative research in designing messages, and were of sufficient intensity over an extended period. (Health gain notation – 2 *"likely to be beneficial"*) **Caveats:** Studies were in different countries. Media campaigns tend to be culturally sensitive so the response in Wales may be different.	**i.** Sowden AJ, Arblaster L. Mass media interventions for preventing smoking among young people. *Cochrane Library* 1998 Issue 4 http://www.update-software.com/ccweb/cochrane/revabstr/ab001291.htm [accessed 3.3.00] (Type I evidence – systematic review of 6 controlled trials of children and young adults under 25. Some randomised trials. At least 57 uncontrolled trials available but not reviewed)
1.2f. A **widely advertised telephone helpline,** with support material available through it, could be effective in promoting smoking cessation in smokers in the general population[i]. In Scotland a before-and-after comparison of such a helpline suggested that 6% of the smoking adult population contacted the helpline (which was advertised on television and posters). In a 10% random sample followed up over a year, 23.6% claimed they were non-smokers, 19.6% were smoking less, and overall 42.4% had stopped at some time during the year. The population rate of decline in smoking was greater during and after the campaign than preceding it (2% compared to 0.8%). Confounding variables such as cigarette advertising, tobacco price and other smoking cessation adverts were considered. Unknown confounders could not be accounted for in this type of study. (Health gain notation – 2 "likely to be beneficial")	**i.** Platt S, Tannahill A, Watson J, Fraser E. Effectiveness of antismoking telephone helpline: follow up survey. *British Medical Journal* 1997; **314**: 1371-1375 http://www.bmj.com/cgi/content/full/314/7091/1371 [accessed 3.3.00] (Type III evidence – follow-up study of a cohort of 848 adult smokers)
1.2g. **No Smoking Day** is effective in achieving smoking cessation in the population. In Wales in 1996 a high level of awareness of the day was achieved and participation was high. Three month quit rates are estimated at 0.3% to 1.8%, which translates to a large number of smokers quitting at the population level[i]. Smokers who had firm plans to quit are more likely to be motivated by the day[i]. (Health gain notation – 2 *"likely to be beneficial"*)	**i.** Frith C, Roberts C, Kingdon A, Tudor-Smith C. An evaluation of the 1996 No Smoking Day in Wales. *Health Education Journal* 1997; **56**: 287-95 (Type III evidence – before and after study)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

1.3 Environmental tobacco smoke

1.3a. Cochrane reviews are under way to examine the effect of **smoking prevention and control programmes for families and carers** to reduce children's exposure to environmental tobacco smoke[i] and **interventions for preventing tobacco use in public places**[ii].
See also Section 1.7 on 'Smoking prevention and cessation in the workplace'.

i. Waters E, Campbell R, Webster P, Spencer N. Smoking prevention and control programmes for families and their carers to reduce children's exposure to tobacco smoke (Protocol). Cochrane Database of Systematic Reviews. *Cochrane Library* 1999 Issue 4
(Type I evidence – systematic review in progress)

ii. Serra C, Cabezas C, Bonfil X, Pladevall-Vila M. Interventions for preventing tobacco use in public places (Protocol). Cochrane Database of Systematic Reviews. *Cochrane Library* 1999 Issue 4
(Type I evidence – systematic review in progress)

1.4 Prevention of smoking in children and young people

1.4a. Community action for preventing smoking in young people can be effective when multi-faceted approaches are used, targeting multiple sites such as schools, work places and churches. Multi-faceted approaches include age restriction on tobacco purchase, smoke-free public places, media campaigns and special programmes in schools[i].
(Health gain notation – 2 *"likely to be beneficial"*)

i. NHS Centre for Reviews and Dissemination. Preventing the uptake of smoking in young people. *Effective Health Care.* 1999; **5(5)**
http://www.york.ac.uk/inst/crd/ehc55.htm
[accessed 10.3.00]
(Type I evidence – systematic review citing Sowden A, Arblaster L. Community interventions for preventing smoking in young people. Cochrane Database of Systematic Reviews. *Cochrane Library* 1999 Issue 4)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

1.4b. Interventions with retailers lead to decreased illegal sales of cigarettes to 'under age' children and young people[i].
(Health gain notation – 2 *"likely to be beneficial"*)
Active enforcement and mobilising community support are more effective than retailer educational initiatives alone. The infringement penalty to the retailer may be important – a graduated system of penalties may prevent a backlash against tobacco control measures. **Warning letters threatening prosecution** are effective. Voluntary compliance programmes do not appear to be effective.

Vending machines – a locking device policy was effective in reducing the number of places selling cigarettes to those underage.
(Health gain notation – 2 *"likely to be beneficial"*)
An enforced ban on vending machines may be more effective.

Most studies that measured it failed to demonstrate a significant difference in **perceived ease of access to cigarettes by children,** despite reduced illegal sales. However no studies measured actual access (other than purchases).
(Health gain notation – 4 *"unknown"*)

Although difficult to assess in the community, some effect of reducing smoking, particularly amongst 12 year olds, was noted in two of the better quality studies. A study by Forster et al (1996) cited in the review, appeared to influence smoking through reduced sales from intervention retailers **posting warning notices and storing cigarettes behind counters.**

In summary, comprehensive measures which include sustained law enforcement and community mobilisation, with the banning of vending machines, along with a graduated system of retailer penalties are likely to lead to reduced cigarette sales. These measures would probably lead to reduced smoking in younger age groups. There is a lack of evidence that actual non-purchase access to cigarettes increases significantly as a result of these interventions[i].
(Health gain notation – 2 "likely to be beneficial")

The *evidence*

i. Stead LF, Lancaster T. Interventions for preventing tobacco sales to minors. *Cochrane Library* 1999 Issue 4
http://www.update-software.com/ccweb/cochrane/revabstr/ab001497.htm [accessed 3.3.00]
(Type I evidence - systematic review of 27 studies, 13 of which were controlled)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

1.4c. A Cochrane review is being conducted on **school-based programmes** for preventing smoking[i].

To date it appears that programmes based mainly in schools are limited in their effectiveness. **Social reinforcement/social norms** type programmes seem to be more effective than solely knowledge based programmes. Problems that have been identified include the training of teachers and programmes targeted at children after they have started smoking[ii]. In an intention to treat analysis, a recent large cluster randomised trial of 3 computer sessions and 3 classroom sessions (based on a trans-theoretical 'stages of change' model) over a year showed no difference between intervention and control schools in the prevalence of smoking in 13-14 year olds[iii]. A large randomised trial of peer-led schools programmes has yet to be conducted. However, a small evaluation study in the former Mid Glamorgan showed promising results, although bias or chance could have explained them[iv].
(Health gain notation – 4 *"unknown"*)

In a combined quantitative and qualitative study the most important factor that influenced smoking prevalence among school students at a given school was the **culture of the school,** and this was over and above any socioeconomic factors[v]. The European Network of Health Promoting Schools may also be important in helping to prevent smoking in pupils and staff by encouraging healthy lifestyles through policy implementation and supportive environments[ii].
(Health gain notation – 2 *"likely to be beneficial"*)

The *evidence*

i. Thomas R, Busby K.School based programmes for preventing smoking (Protocol). Cochrane Database of Systematic Reviews. *Cochrane Library* 1999 Issue 4
(Type I evidence – systematic review in progress)

ii. NHS Centre for Reviews and Dissemination. Preventing the uptake of smoking in young people. *Effective Health Care* 1999; **5(5)**
http://www.york.ac.uk/inst/crd/ehc55.htm
[accessed 3.3.00]
(Type I evidence – overview of seven systematic reviews)

iii. Aveyard P, Cheng KK, Almond J, *et al.* Cluster randomised controlled trial of expert system based on the transtheoretical ('stages of change') model for smoking prevention and cessation in schools. *British Medical Journal* 1999; **319**: 948-953
http://www.bmj.com/cgi/content/full/319/7215/948
[accessed 3.3.00]
Type II evidence – large cluster randomised controlled trial with intention to treat analysis)

iv. Bloor M, Frankland J, Parry Langdon N, *et al.* A controlled evaluation of an intensive, peer-led, schools based, anti smoking programme. *Health Education Journal* 1999; **58**: 17-25
(Type III evidence – small non-randomised study with control group)

v. *Report of the Scientific Committee on Tobacco and Health.* London: The Stationery Office, 1998
(Type V evidence – expert opinion based on type IV evidence citing Lloyd B, Lucas K. *Why do young girls smoke? A quantitative/behavioural study.* A report for the Department of Health 1996 [unpublished])

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

1.5 Smoking cessation in children and young adults

1.5a. There is a lack of published research on **effective interventions for smoking cessation in young people.** Effective interventions for adults may or may not be effective in children and young adults, and there may be additional problems in making any effective intervention available to this group.
There is a need for evaluation of the effectiveness of smoking cessation programmes amongst children and young adults.

1.6 Smoking cessation in pregnancy

1.6a. Simple and more complex advice to pregnant women to quit smoking is effective in increasing smoking cessation (all intervention over no interventions, for continued smoking in late pregnancy, odds ratio 0.51 [95% CI: 0.45, 0.58], absolute difference 6.6%). Interventions did not include advice to cut down. For women who had already stopped smoking at first antenatal visit, there was a trend towards a greater reduction in relapse rate in those advised not to smoke. Additional group sessions for smoking cessation in pregnancy are poorly accepted by women[i].
(Health gain notation –1 "*beneficial*")
Caveat: The results of these studies did not give differential results for these interventions for women according to socioeconomic group.

The percentage of pregnant women who recalled receiving anti-smoking advice from a health professional was 49% in the prospective Health Education Authority study[ii] but 85% in the retrospective Infant Feeding study[iii].
(Health gain notation –2 "likely to be beneficial")
Caveat: One third of women receiving advice from a GP, and almost one half receiving advice from a midwife, recall being advised to cut down cigarette consumption rather than to quit[ii].

i. Lumley J, Oliver S, Waters E. Interventions for promoting smoking cessation during pregnancy. *Cochrane Library* 1999 Issue 4
http://www.update-software.com/ccweb/cochrane/revabstr/ab001055.htm [accessed 3.3.00]
(Type I evidence – systematic review of randomised controlled trials. Main outcome derived from pooled data of 30 trials. Subjects were healthy pregnant women, mainly in a hospital or community antenatal clinic setting)

ii. *Report of the Scientific Committee on Tobacco and Health.* London: The Stationery Office, 1998
(Type V evidence – expert opinion based on type IV evidence citing: Health Education Authority. *Trends in Smoking and Pregnancy 1992-1997. Report of the Scientific Committee on Tobacco and Health.* London: The Stationery Office, 1998)

iii. *Report of the Scientific Committee on Tobacco and Health.* London: The Stationery Office, 1998
(Type V evidence – expert opinion based on type IV evidence citing: Social Services Division of the Office for National Statistics. *Infant Feeding* 1995. London: The Stationary Office, 1997)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

1.7 Smoking prevention and cessation in the workplace

1.7a. Tobacco policies at work were found to reduce cigarette consumption at work and worksite environmental tobacco smoke exposure[i].
(Health gain notation – 2 *"likely to be beneficial"*)

Smoking cessation group programmes were found to be more effective than minimal treatment programmes[i].
(Health gain notation – 2 *"likely to be beneficial"*)

Caveat: It is difficult to summarise the results of this review. It is probably systematic although this is not clear. Most studies were in US work settings. A numerical meta-analysis was not possible. The statements are based on consistent findings from 52 original studies.

A meta-analysis of **worksite smoking cessation** programmes[ii] showed that quit rates at one year of 12% to 18% could be achieved, the weighted average quit rate being 13%. However the analysis was not on an intention to treat basis. Programmes with the following independent predictor variables had larger quit rates: had a cessation group component; heavier smokers; with more intensive intervention; that were not complicated; in smaller companies; and shared company and employee time.
(Health gain notation – 2 *"likely to be beneficial"*)

i. Eriksen MP, Gottileb NH. A review of the Health Impact of Smoking Control in the Workplace. *American Journal of Health Promotion* 1998; **13**: 83-104
(Type IV evidence - a narrative systematic review of only reasonable quality including randomised, other interventional and observational studies)

ii. Fisher KJ, Glasgow RE, Tervorg JR. Worksite smoking cessation: A meta-analysis of long term quit rates from controlled studies. *Journal of Occupational Medicine* 1990; **32(5)**: 429-439
(Type III evidence - a systematic review and meta-analysis of controlled studies, not necessarily randomised)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
1.8 Smoking cessation in adults	
1.8a. Guidelines can be effective in changing practitioner behaviour if local circumstances are taken into consideration, they are disseminated by educational interventions and are used with patient-specific reminders. They are more likely to have an effect if used as part of more complex measures to improve and change services[i]. Evidence based guidelines exist for smoking cessation in adults[ii].	**i.** Getting evidence into practice. *Effective Health Care* 1999; **5(1)** http://www.york.ac.uk/inst/crd/ehc51.htm [accessed 6.4.00] (Type I evidence – overview of 44 systematic reviews) **ii.** British Thoracic Society. Smoking Cessation Guidelines and their Cost Effectiveness. *Thorax* 1998; **53** (supplement): S1-S18 (Guidelines based on type I, II, III, VI and V evidence)
1.8b. Group behavioural therapy is more effective than self-help programmes (odds ratio 2.10 [95% CI: 1.64, 2.70]), and more effective than no intervention or minimal contact (odds ratio 1.91 [95% CI: 1.20, 3.04]). It is probably of similar effectiveness to individual counselling of comparable intensity[i]. (Health gain notation – 1 *"beneficial"*)	**i.** Stead LF, Lancaster T. Group behaviour therapy programmes for smoking cessation. *Cochrane Library* 1998 Issue 4 http://www.update-software.com/ccweb/cochrane/revabstr/ab001007.htm [accessed 3.3.00] (Type I evidence – meta-analysis of systematic review of randomised controlled trials. 19 studies compared a group programme with another method or control. Most recruited community volunteers; 2 from primary care settings: one in people with cardiovascular disease and one in those with diabetes)
1.8c. Brief simple advice, and more **complex advice** to quit smoking (not to cut down) is effective when delivered by any type of health care professional, compared to no intervention (for psychologist/ social worker/ counsellor: odds ratio 1.8 [95% CI 1.5, 2.2]; for physician odds ratio: 1.5 [95% CI 1.2, 1.9]; for dentist/ nurse/ pharmacist: odds ratio 1.4 [95% CI 1.1, 1.8])[i]. There is no clear advantage to any professional type but **very high cessation rates** occur when many types of professionals reinforce the advice to each client (odds ratio compared to no intervention 3.8 [95% CI 2.6, 5.6])[i]. (Health gain notation – 1 *"beneficial"*)	**i.** Fiore MC, Bailey WC, Cohen SJ, et al. *Smoking Cessation.* Clinical Practice Guideline No 18. Rockville, MD: US Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research. AHCPR Publication No. 96-0692. April 1996 http://www.ahcpr.gov/meta.htm [accessed 3.3.00] (Type I evidence – meta-analysis of systematic review of randomised controlled trials)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
1.8d. **Individual behavioural counselling** from a healthcare worker is effective in smoking cessation. (Odds ratio for smoking cessation 1.55 [95% CI: 1.27, 1.90]). Intensive counselling is not superior to brief counselling (Odds ratio 1.17 [95% CI 0.59, 2.34][i]. (Health gain notation – 1 *"beneficial"*) **Caveats:** Counselling was defined by a minimum time spent with the smoker by a counsellor trained in smoking cessation. This did not include counselling by doctors and nurses as part of clinical care, nor any specific behavioural technique.	**i.** Lancaster T, Stead LF. Individual behavioural counselling for smoking cessation. *Cochrane Library* 1999 Issue 2. http://www.update-software.com/ccweb/cochrane/revabstr/ab001292.htm [accessed 3.3.00] (Type I evidence – meta-analysis of systematic review of controlled trials. 11 trials identified, all except one randomised. 7 studies in hospitalised patients. Level of motivation to quit difficult to assess. Intervention in control groups varied.)
1.8e. **Systematically identifying and documenting smoking status** results in much higher rates of smoking cessation interventions by clinicians (odds ratio 3.1 [95% CI 2.2, 4.2]) and a trend to higher rates of smoking cessation (odds ratio 2.0 [95% CI 0.8, 4.8])[i]. (Health gain notation – 1 *"beneficial"*) **Caveat:** Based on small numbers in only three studies. Most of the studies did not set out to measure smoking cessation as the outcome.	**i.** Fiore MC, Bailey WC, Cohen SJ, et al. *Smoking Cessation.* Clinical Practice Guideline No 18. Rockville, MD: US Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research. AHCPR Publication No. 96-0692. April 1996 http://www.ahcpr.gov/meta.htm [accessed 3.3.00] (Type I evidence – meta-analysis of systematic review of randomised controlled trials)
1.8f. **Training healthcare professionals** in smoking cessation techniques is effective in increasing smoking cessation in their patients[i]. (Odds of stopping smoking if attended by trained professional versus control professional: odds ratio 1.48 [95% CI 1.20, 1.83]). The use of prompts and reminders in practice, as well as training increases the odds of quitting[i]. (odds ratio 2.37 [95% CI 1.43, 3.92]) (Health gain notation – 1 *"beneficial"*) **Caveat:** All the trials were in North America.	**i.** Lancaster T, Silagy C, Fowler G, Spiers I. Training health professionals in smoking cessation. *Cochrane Library* 1998 Issue 4 http://www.update-software.com/ccweb/cochrane/revabstr/ab000214.htm [accessed 3.3.00] (Type I evidence – meta-analysis of systematic review of randomised controlled trials. 9 trials identified)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

1.8g. Simple brief advice by a general practitioner to quit smoking is effective[i,ii] (GP advice versus no advice odds ratio 1.32 [95% CI 1.18,1.48], NNT 35)[ii]. (Odds ratio for abstinence at least at 6 months, for brief advice over no advice 1.73 [95% CI: 1.47, 2.02][i], and 1.5 [95% CI 1.2, 1.9][ii]). Advice was defined as taking 3 minutes or less.
(Health gain notation – 1 *"beneficial"*)

i. Ashenden R, Silagy C, Weller D. A systematic review of the effectiveness of promoting lifestyle changes in general practice. *Family Practice* 1997; **14(2)**: 160-175. In: University of York NHS CRD DARE Search Document 4
(Type I evidence – systematic review)

ii. Fiore MC, Bailey WC, Cohen SJ, et al. *Smoking Cessation.* Clinical Practice Guideline No 18. Rockville, MD: US Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research. AHCPR Publication No. 96-0692. April 1996
http://www.ahcpr.gov/meta.htm [accessed 3.3.00]
(Type I evidence – meta-analysis of systematic review of randomised controlled trials)

1.8h. Simple brief advice to quit (not cut down) smoking from **nurses and health visitors** is effective in increasing smoking cessation compared to no intervention or usual care (odds ratio 1.43 [95% CI: 1.24 to 1.66])[i]. There is no evidence that more intensive interventions are more effective than less intensive ones. Advice to quit is effective for both hospitalised and non-hospitalised patients.
(Health gain notation – 1 *"beneficial"*)

i. Rice VH, Stead LF. Nursing interventions for smoking cessation. *Cochrane Library* 1999 Issue 3
http://www.update-software.com/ccweb/cochrane/revabstr/ab001188.htm [accessed 3.3.00]
(Type I evidence – meta-analysis of a systematic review)

1.8i. Self-help materials have a small effect on smoking cessation, compared to no intervention (Odds ratio 1.23 [95% CI 1.01, 1.51])[i]. Personalised, tailored self-help material is more effective (odds ratio 1.51 [95% CI 1.13, 2.02]). Telephone follow up in addition to self-help material is more effective than self-help alone (odds ratio 1.62 [95% CI 1.33, 1.97]). The self-help material had to provide structured behavioural strategies (not just information) to assist an unaided attempt to give up smoking. There is no additional benefit over brief therapist contact[i].
(Health gain notation – 1 *"beneficial"*)

i. Lancaster T, Stead LF. Self-help interventions for smoking cessation. *Cochrane Library* 1998 Issue 4
http://www.update-software.com/ccweb/cochrane/revabstr/ab001118.htm [accessed 3.3.00]
(Type I evidence – meta-analysis of systematic review of mostly randomised controlled trials. 41 trials identified. Uncertain of settings and groups actually discovered by review although studies of any smokers other than in pregnancy searched for)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
1.8j. Proactive telephone counselling of known smokers for smoking cessation is likely to have a small positive effect (odds ratio at 12 to 18 months follow up 1.20 [95% CI: 1.06, 1.37])[i]. (Health gain notation – 1 "beneficial")	**i.** Liechtenstein E, Glasgow RE, Lando HA, Ossip-Klein DJ. Telephone counselling for smoking cessation: rationales and meta-analytic review of *Health Education Research* 1996; **11**: 243-57 (Type I evidence – meta-analysis of systematic review of 13 randomised controlled trials, nine included in the final pooled odds ratio after testing for homogeneity)
1.8k. In smokers motivated to quit, a **'buddy system'** is very effective in the short term in a general practice nurse-led smoking cessation clinic. Smoking cessation at 4 weeks after quit date is doubled in smokers paired with each other for mutual support between clinic sessions ('buddy' system), compared to smokers attending alone ('solo' system). (Odds ratio 2.6, p<0.05, absolute risk difference 15%, NNT 6.7)[i]. All smokers were seen by the trained practice nurse and given brief simple structured advice. (Health gain notation – 1 *"beneficial"*) **Caveat:** Inner urban general practice population in South East London. Need for caution about generalisability. Smokers in both groups were offered nicotine replacement therapy unless it was inappropriate.	**i.** West R, Edwards M, Hajek P. A randomized controlled study of a 'buddy' system to improve success at giving up smoking in general practice. *Addiction* 1998; **93(7)**: 1007-1011 (Type II evidence – un-blinded randomised controlled trial of 172 smokers in general practice setting)
1.8l. A Cochrane review is underway to examine the effect of **interventions for smoking cessation in hospitalised patients**[i].	**i.** Rigotti NA, Munafo M. Interventions for smoking cessation in hospitalised patients (Protocol) Cochrane Database of Systematic Review. *Cochrane Library* 1999 Issue 4 (Type I evidence – systematic review in progress)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

1.9 Smoking cessation in adults - Pharmacological products

1.9a. Nicotine replacement therapy (NRT) is an **effective** component of cessation strategies in **heavier smokers who are motivated** to quit (Odds ratio for abstinence with NRT over control 1.73 [95% CI: 1.60, 1.86])[i]. 8 weeks of patch therapy is as effective as longer courses. There is no evidence that tapered therapy is better than abrupt withdrawal. Wearing the patch during waking hours is as effective as wearing it for 24 hours/day.
(Health gain notation – 1 *"beneficial"*)

There is evidence for the ineffectiveness of **nicotine replacement therapy** for individuals smoking **less than 10-15 cigarettes per day**[i].
(Health gain notation – 5 "unlikely to be effective")

Further research is needed to compare different types of nicotine replacement therapy.

i. Silagy C, Mant D, Fowler G, Lancaster T. Nicotine replacement therapy for smoking cessation. *Cochrane Library* 1998 Issue 4
http://www.update-software.com/ccweb/cochrane/revabstr/ab000146.htm [accessed 3.3.00]
(Type I evidence – meta-analyses within systematic review of randomised controlled trials, including 25,600 smokers in total)

1.9b. Clonidine appears to have some beneficial effect in smoking cessation (Pooled odds ratio for abstinence at 12 weeks of clonidine over placebo 1.87 [95% CI: 1.27, 2.77][i].
(Health gain notation – 3 *"trade off between beneficial and adverse effects"*)

Caveats: Because of concerns about the methods of some of the primary studies and of the frequency of adverse effects, it cannot be recommended as a first line treatment. It appears to be useful in

- Extreme agitation during withdrawal
- Multiple drug withdrawal

i. Gourlay SG, Stead LF, Benowitz NL. Clonidine for smoking cessation. *Cochrane Library* 1998 Issue 4
http://www.update-software.com/ccweb/cochrane/revabstr/ab000058.htm [accessed 3.3.00]
(Type I evidence – which included meta analysis of 5 randomised controlled trials, assessing smoking cessation at least 12 weeks after end of treatment. Total of 722 participants. Uncertain about the effects of bias)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
1.9c. There is insufficient evidence to recommend **antidepressants** as first line treatment in smoking cessation in preference to nicotine replacement therapy[i]. (Health gain notation – 4 *"unknown"*)	**i.** Hughes JR, Stead LF, Lancaster TR. Anxiolytics and antidepressants in smoking cessation. *Cochrane Library* 1998 Issue 4 http://www.update-software.com/ccweb/cochrane/revabstr/ab000031.htm [accessed 3.3.00] (Type I evidence – systematic review)
1.9d. There is insufficient evidence to recommend the use of **mecamylamine** in smoking cessation[i]. (Health gain notation – 4 *"unknown"*)	**i.** Lancaster T, Stead L. Mecamylamine (a nicotine antagonist) for smoking cessation. *Cochrane Library* 1998 Issue 4 http://www.update-software.com/ccweb/cochrane/revabstr/ab001009.htm [accessed 3.3.00] (Type I evidence – systematic review but the two small studies identified does not allow confident assessment of effect size)
1.9e. There is lack of evidence for the effectiveness of **lobeline** resulting in long term abstinence in smoking[i]. (Health gain notation – 4 *"unknown"*) **Caveat:** There is evidence for the ineffectiveness of lobeline resulting in short term abstinence in smoking.	**i.** Stead LF, Hughes JR. Lobeline for smoking cessation. *Cochrane Library* 1998 Issue 4 http://www.update-software.com/ccweb/cochrane/revabstr/ab000124.htm [accessed 3.3.00] (Type III evidence – systematic review but no randomised controlled trials of long term follow up available)
1.9f. Existing evidence suggests that **silver acetate** is ineffective in smoking cessation (Pooled odds ratio for quitting smoking for silver acetate over placebo 1.05 [95% CI: 0.63, 1.73][i]. (Health gain notation – 6 *"likely to be ineffective or harmful"*)	**i.** Lancaster T, Stead L. Silver acetate for smoking cessation. *Cochrane Library* 1998 Issue 4 http://www.update-software.com/ccweb/cochrane/revabstr/ab000191.htm [accessed 3.3.00] (Type I evidence – systematic review including two randomised controlled trials, showing outcome as sustained smoking abstinence at 6-12 months)
1.9g. There is evidence that **anxiolytics** are ineffective in smoking cessation[i]. (Health gain notation – 6 *"likely to be ineffective or harmful"*)	**i.** Hughes JR, Stead LF, Lancaster TR. Anxiolytics and antidepressants in smoking cessation. *Cochrane Library* 1998 Issue 4 http://www.update-software.com/ccweb/cochrane/revabstr/ab000031.htm [accessed 3.3.00] (Type I evidence – systematic review)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
1.10 Smoking cessation in adults - Alternative and complementary therapies	
1.10a. **Acupuncture** is ineffective in achieving sustained smoking cessation (odds ratio at 12 months 1.02 [95% CI 0.72, 1.43])[i]. No one method of acupuncture is superior to control (Health gain notation – 6 *"likely to be ineffective"*)	**i.** White AR, Rampas H, Ernst E. Acupuncture for smoking cessation. *Cochrane Library* 1998 Issue 4 http://www.update-software.com/ccweb/cochrane/revabstr/ab000009.htm [accessed 3.3.00] (Type I evidence – systematic review and meta-analysis of 14 trials)
1.10b. There is insufficient evidence at present to support the use of **hypnotherapy** in smoking cessation[i]. (Health gain notation- 4 *"unknown"*)	**i.** Abbot NC, Stead LF, White AR, Barnes J, Ernst E. Hypnotherapy for smoking cessation. *Cochrane Library* 1998 Issue 4 http://www.update-software.com/ccweb/cochrane/revabstr/ab001008.htm [accessed 3.3.00] (Type I evidence – systematic review of 9 randomised controlled trials. Insufficient data to perform meta-analysis owing to small studies, heterogeneity of interventions and controls)
1.10c. There is insufficient evidence for supporting the use of **aversive therapy** methods in smoking cessation[i]. (Health gain notation- 4 *"unknown"*) **Caveat:** Although the pooled odds ratio for repulsion through rapid smoking vs control is 2.08 [95% CI 1.39, 3.12], a funnel plot showed an absence of small studies with negative results. Other aversion methods did not appear to be effective. Most studies showed serious methodological problems likely to lead to spurious positive results.	**i.** Hajek P, Stead LF. Aversive smoking for smoking cessation. *Cochrane Library* 1998 Issue 4 http://www.update-software.com/ccweb/cochrane/revabstr/ab000546.htm [accessed 3.3.00] (Type I evidence – systematic review of 24 randomised controlled trials. Insufficient data with methodoligical problems and probable publication bias)

2 ALCOHOL MISUSE

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

Alcohol misuse causes a substantial number of deaths, injuries and other health problems. UK rates of drinking in excess of sensible limits are high, particularly amongst young people in Wales.

The *statements* | The *evidence*

2.1 Prevalence

2.1a. The **misuse of alcohol** has a high prevalence in the UK[i]. In 1996, it was estimated that 27% of male and 14% of female over 18s drank in excess of sensible limits. Trends reflect rising consumption for women across all age groups and in young men. 6% of men and 2% of women drink at harmful levels[ii].

i. *The 1997 Health Education Monitoring Survey.* London: Office for National Statistics, 1998
http://www.ons.gov.uk/nsils_f.htm [accessed 3.3.00]
(Type IV evidence – statistics)

ii. *Health Related Behaviour: Prevalence of Alcohol Consumption above 21/14 Units a week for Men/Women aged 18 and over.* General Household Survey 1996. London: The Stationery Office, 1998
(Type IV evidence – statistics)

2.1b. Amongst young people, research shows that the **age at which young people begin to drink** is decreasing, whilst the amount drunk and the frequency of consumption has increased, often in the context of other high risk activity including the use of illicit drugs[i-iii]. Comparative studies across Europe have also found that 15 year olds in Wales in 1990 and 1993/4 were consuming significantly more alcohol than young people of the same age in other European countries[iv].

i. Newcombe R, Measham F, Parker H. A survey of drinking and deviant behaviour among 14/15 year olds in North West England. *Addiction Research* 1995; **2(4)**: 319 – 341.
(Type IV evidence – cohort study of 776 young people)

ii. Miller P McC, Plant M. Drinking, smoking and illicit drug use among 15-16 year olds in the United Kingdom. *British Medical Journal* 1996; **313**: 394-397
[accessed 3.3.00]
(Type IV evidence – cross-sectional survey of 70 secondary schools)

iii. Royal College of Physicians and British Paediatric Association. *Alcohol and the Young.* London: Royal Colleges of Physicians, 1995
(Type V evidence – expert opinion)

iv. Harkin AM, Anderson P, Lehto J. *Alcohol in Europe - a Health Perspective*. Copenhagen: WHO Regional Office for Europe, 1995
(Type V evidence – expert opinion)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

2.1c. Some 4,500 **deaths** in the UK in 1996 were directly attributable to **alcohol misuse** and it was implicated in up to 40,000 deaths in total[i,ii]. It is also a major factor in causing injuries, including 15% of road traffic accidents[iii], 30% of pedestrian accidents[iii], and 25% of work related accidents[iv]. Alcohol misuse has been associated with up to 47% of drownings[v].

i. Office for National Statistics. *Mortality Statistics, Cause, England and Wales,* 1997. London: Stationery Office, 1998
(Type IV evidence – statistics)

ii. Raistrick D, Hodgson RJ, Ritson B (eds.); Society for the Study of Addiction. *Tackling Alcohol Together. The Evidence Base for a UK Alcohol Policy.* London: Free Association Books, 1999
(Type V evidence – expert opinion)

iii. Department of Environment, Transport and the Regions. *Road Accidents Great Britain.* 1997. *The Casualty Report*. London: DETR, 1998
(Type IV evidence – statistics)

iv. International Labour Office. *Responses to Drugs and Alcohol in the Workplace*. Geneva: ILO, 1987. (cited in National Alcohol Strategy, Alcohol Concern.)
(Type V evidence – expert opinion)

v. Hingson R, Howland J. Alcohol and non-traffic unintended injuries. Addiction 1993; **88**: 877-883
(Type IV evidence – 36 studies of drowning incidents)

2.1d. Significant **health problems** associated with alcohol use include hypertension, haemorrhagic stroke, cardiovascular disease, and liver cirrhosis as well as alcohol dependence and other behavioural and social problems[i, ii].

i. Royal College of Physicians, Royal College of Psychiatrists and the Royal College of General Practitioners. *Alcohol and the Heart: Sensible Limits Reaffirmed.* London: Royal College of Physicians, 1995
(Type V evidence – expert opinion)

ii. Anderson P, Babor TF and Edwards G et al (eds). *Alcohol Policy and the Public Good.* Oxford: Open University Press, 1994.
(Type V evidence – expert opinion)

2.1e. It is estimated that 8 out of 10 people needing treatment at **Accident and Emergency Departments** at peak times have alcohol-related injuries or problems[i].

i. Waller S, Thom B, Harris S, Kelly M. Perception of alcohol related attendances in A & E departments in England: A national survey. *Alcohol and Alcoholism* 1998; **33(4)**: 354-361
(Type IV evidence – survey, in 1997, of all Accident and Emergency Departments in England)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

2.2 Public education and campaigns

2.2a. Information campaigns can improve knowledge and raise awareness[i, ii]. For example drink driving campaigns have been shown to increase public awareness, heighten perceived risk of detection when drinking and driving and raise awareness of the penalties[iii, iv]. It is recommended that effectiveness will be maximised if campaigns are placed within a broader context of community action[i, ii].
(Health gain notation - 2 *"likely to be beneficial"*)

i. Gorman DM, Speer PW. Preventing alcohol abuse and alcohol related problems through community intervention: A review of evaluation studies. *Psychology and Health* 1996; **11**: 95-131
(Type I evidence – systematic review of 8 community based studies)

ii. Gerstein D, Green L (eds). *Preventing Drug Abuse What do we Know?* London: Committee on Drug Abuse Prevention Research, National Research Council, National Academy Press, 1993.
(Type V evidence – expert opinion)

iii. Holder H. Mass communication as an essential aspect of community prevention to reduce alcohol in traffic crashes. *Alcohol, Drugs and Driving* 1994; **10 (3-4)**: 295-307
(Type III evidence – non randomised community trial)

iv. Hingson R, McGovern T, Heeren T, Winter M, Zakocs R. Impact of the Saving Lives Program, 19th Annual Alcohol Epidemiology Symposium, Krakow, Poland, June 1993, cited in Edwards G *et al* (eds). *Alcohol and the Public Good*. Oxford: Open University Press, 1994
(Type V evidence – expert opinion)

2.2b. Educational messages will be more effective if **tailored for specific sub groups** of recipients, for example, children, adolescents, young adults, elderly and specific situations such as at work, during pregnancy and if driving, in order to help clarify the advice around safe limits and the benefits of alcohol[i,ii].
(Health gain notation - 2 *"likely to be beneficial"*)

i. *Health Promotion with Young People for Prevention of Substance Misuse.* Health promotion effectiveness review. London: Health Education Authority, 1997
http://www.hea.org.uk/research/download/ereview5.html
[accessed 3.3.00]
(Type V evidence – expert opinion based on a systematic review)

ii. Anderson P, Babor TF and Edwards G et al (eds). *Alcohol and the Public Good.* Oxford: Open University Press, 1994
(Type V evidence – expert opinion)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

2.2c. The **sensible limits** recommended by the Royal Colleges of Physicians, Psychiatrists and General Practitioners are:
Low risk: 0-14 units of alcohol per week for women and 0-21 units for men.
Increasing risk: 15-35 units of alcohol per week for women, 22-50 units per week for men
Harmful: over 35 units per week for women and over 50 units per week for men[i,ii,iii].

One study has identified a strong positive relation between alcohol consumption and risk of mortality from stroke, with men drinking 35 or more units having double the risk of non-drinkers, even after adjustment. Overall, risk of all cause mortality was higher in men drinking 22 or more units a week[iv].

1 unit = 1 glass of wine or 1 single spirits or half pint of beer.

The *evidence*

i. Royal College of Physicians, Royal College of Psychiatrists and the Royal College of General Practitioners. *Alcohol and the Heart: Sensible Limits Reaffirmed.* London: Royal College of Physicians, 1995
(Type V evidence – expert opinion)

ii. Marmot M. A not so sensible drinks policy. *Lancet* 1995; **346**: 1643-4,
(Type V evidence – expert opinion)

iii. Edwards G. Sensible Drinking. Doctors should stick with the independent medical advice. *British Medical Journal* 1996; **312**: 1-2,
http://www.bmj.com/cgi/content/full/312/7022/1 [accessed 3.3.00]
(Type V evidence – expert opinion)

iv. Hart CL, Davey Smith G, Hole DJ, Hawthorne VM. Alcohol consumption and mortality from all causes, coronary heart disease and stroke: results from a prospective cohort study of Scottish men with 21 years of follow up. *British Medical Journal 1999*; **318**: 1725-1729.
http://www.bmj.com/cgi/content/full/318/7200/1725 [accessed 3.3.00]
(Type IV evidence – prospective cohort study of 5766 men)

2.2d. Campaigns can contribute to an effect on the social climate surrounding alcohol use. They can be used to reinforce specific environmental efforts to reduce high risk drinking in general, and drinking and driving in particular[i]. Messages will be most effective when combined with pressures from legal and other restrictions[ii, iii].
(Health gain notation - 2 *"likely to be beneficial"*)

i. Holder H. Mass communication as an essential aspect of community prevention to reduce alcohol-involved traffic crashes. *Alcohol, Drugs and Driving* 1994; **10(3-4)**: 295-307
(Type III evidence – non randomised community intervention trial)

ii. Anderson P, Babor TF and Edwards G et al (eds). *Alcohol and the Public Good.* Oxford: Open University Press, 1994
(Type V evidence – expert opinion)

iii. Harkin AM, Anderson P, Lehto J. World Health Organisation Regional Office for Europe. *Alcohol in Europe - a Health Perspective.* Copenhagen: WHO, 1995
(Type V evidence – expert opinion)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

2.2e. When campaigns/information are supplemented with more **interactive, or personally directed interventions,** this is more likely to direct behaviour change[i,ii,iii].
(Health gain notation - 2 *"likely to be beneficial"*)

The *evidence*

i. *Health Promotion with Young People for Prevention of Substance Misuse.* Health promotion effectiveness review. London: Health Education Authority, 1997
http://www.hea.org.uk/research/download/ereview5.html
[accessed 3.3.00]
(Type I evidence – systematic review)

ii. Anderson P, Babor TF and Edwards G et al (eds). *Alcohol and the Public Good.* Oxford: Open University Press, 1994
(Type V evidence – expert opinion)

iii. Anderson K. *Young People and Alcohol, Drugs and Tobacco.* World Health Organisation Regional Publications European Series No. 66. Copenhagen: WHO, 1995
(Type V evidence – expert opinion)

2.2f. Health Benefits. Advice has been given that men over 40 and postmenopausal women may reduce the risk of coronary heart disease by drinking between 1 and 2 units of alcohol a day. Other recommendations include nil consumption of alcohol where maximum physical co-ordination and cognitive ability is required such as driving or operating machinery; lower benchmarks for pregnant women and the need to avoid heavy sessional drinking and intoxication[i].

Any message which increases drinking on the basis of hoped for gains in coronary heart disease prevention, would be likely to result in more harm to the population than benefit[ii].
(Health gain notation - 6 *"likely to be ineffective or harmful"*)

i. Department of Health. *Sensible Drinking: The Report of an Inter-Departmental Working Group.* London: Department of Health, 1995
(Type V evidence – expert opinion)

ii. Anderson P, Babor TF and Edwards G et al (eds). *Alcohol and the public good.* Oxford: Open University Press, 1994
(Type V evidence – expert opinion)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

2.3 Minimal interventions

2.3a. **Minimal interventions delivered at a primary care level** i.e. a few minutes of advice and encouragement, are effective in reducing alcohol consumption and associated harm, especially amongst male excessive drinkers[i-iii].
(Health gain notation - 1 *"beneficial"*)

Caveat: Different interventions will be required to target younger, heavier drinkers[iv]. It should be noted that some primary care staff feel inadequately trained to cope with the issue and time is often a barrier. There may be a need for training and raising awareness of other specialist help available.

Further research into the potential of similar interventions being delivered in a community setting by non-specialist staff such as social workers, probation officers and other front line generic workers is recommended.

i. Bien TH, Miller VR, Tonigan JS. Brief interventions for alcohol problems: a review. *Addiction* 1993; **88(3)**: 315-336
(Type I evidence – systematic review of 32 studies)

ii. Brief interventions and alcohol use. *Effective Health Care* 1993; **7**
(Type I evidence – systematic review of 7 randomised controlled trials)

iii. Fleming MF, Barry KL, Manwell LB, Johnson K, London R. Brief physician advice for problem alcohol drinkers. A randomized controlled trial in community based primary care practices. *Journal of the American Medical Association* 1997; **277(13)**: 1039-1045
(Type II evidence – randomised controlled trial of 723 subjects)

iv. Edwards AGK, Rollnick S. Outcome studies of brief alcohol interventions in general practice: the problem of lost subjects. *Addiction* 1997; **92 (12)**: 1699-1704.
(Type V evidence – expert opinion)

2.3b. The potential of administering **minimal or brief interventions in Accident and Emergency Departments** has yet to be firmly established[i,ii,iii]. One study has shown promising results providing brief interventions (three counselling sessions) delivered by trained nurses.
(Health gain notation - 4 *"unknown"*)

More research is needed, however, to clarify who should deliver the intervention, to whom (those that recognise their problem or as an opportunistic intervention) and in what way – a formal counselling session or as part of A & E routine (stitching or dressing)[ii].

i. Green M, Setchell J, Hames P, Stiff G, Touquet R, Priest R. Management of alcohol abusing patients in accident and emergency departments. *Journal of the Royal Society of Medicine* 1993; **86**: 393-395
(Type III evidence – pilot intervention study of 104 patients identified with an alcohol problem)

ii. Hodgson R, Abbasi T, John B, Smith A. *Alcohol Problems in A & E: a Window of Opportunity.* (Paper commissioned by the Health Education Authority) Cardiff: Cardiff Addiction Research Unit, University of Wales College of Medicine, 1999
(Type III evidence – intervention study in 3 Accident & Emergency Departments in England)

iii. Heather N (1996) The public health and brief interventions for excessive alcohol consumption: the British experience. *Addictive Behaviours* 1996; **21(6)**: 857-868
(Type III evidence – non-systematic review of intervention studies)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements* | The *evidence*

2.4. Family

2.4a **Family social learning and family processes** are an important influence on adolescent alcohol use in a positive and negative way[i,ii,iii,iv].
(Health gain notation - 2 "likely to be beneficial")
Caveat: Prevention programmes have rarely included parents, guardians or siblings as an integral part of the prevention approach.

Research is needed into the effectiveness of programmes which include a family component, combining drug and alcohol prevention skills with other general parenting skills.

i. Elmguist, DL. A systematic review of parent-orientated programmes to prevent children's use of alcohol and other drugs. *Journal of Drug Education* 1995; **25(3)**: 251–279
(Type IV evidence – systematic review and analysis of 72 programmes)

ii. Foxcroft DR, Lowe G Adolescent drinking behaviour and family socialisation factors: a meta analysis. *Journal of Adolescence* 1991; **14**: 255-273
(Type IV evidence – systematic review of 30 observational studies)

iii. Fergusson DM, Lynskey MT, Horwood JL. Childhood exposure to alcohol and adolescent drinking patterns. *Addiction* 1994; **89(8)**: 1007-1016.
(Type IV evidence – cohort study, from birth, of 1265 children)

iv. Foxcroft DR, Lowe G. Adolescents alcohol use and misuse: the socialising influence of perceived family life. *Drug: Education, Prevention and Policy* 1997; **4(3)**: 215–229
(Type IV evidence – questionnaire study of 4000 school pupils)

2.5. The workplace

2.5a. The workplace can be an effective setting in influencing patterns of alcohol consumption and reducing alcohol related problems[i,ii,iii]. Intervention should take place in the context of a **workplace alcohol policy** which covers the following.

- Drinking at the workplace.
- Workplace discipline.
- Recognition and help for those with alcohol related problems.
- Alcohol education.

(Health gain notation - 2 *"likely to be beneficial"*)

i. Hermansson MSW, Knutsson, A Ronnberg, S, Brandt L. Feasibility of brief intervention in the workplace for the detection and treatment of excessive alcohol consumption. *International Journal of Occupational and Environmental Health* 1998; **4(2)**: 71-78
(Type III evidence – screening intervention of 327 employees)

ii. Henderson, MM, Davies JB, Hutcheson, G et al. *Alcohol in the Workplace*. London: Department of Education and Employment, 1995
(Type V evidence – expert opinion)

iii. Fauske S, Wilkinson DA, Shain M. Communicating alcohol and drug prevention strategies and models across cultural boundaries: preliminary report on an ILO/WHO/UNDCP (International Drug Control Program) Interagency Program. *Substance Use and Misuse* 1996; **31 (11-12)**: 1599–1617
(Type V evidence – expert opinion)

iv. Faculty of Public Health Medicine. *Preventing the Harm Related to Alcohol Use: Reducing the Individual Risk.* Guidelines for Health Promotion No.47. London: Faculty of Public Health Medicine, 1996
(Type V evidence – expert opinion)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

2.5b. Brief interventions may work well in the **workplace** setting[i]. One study identified 80% of employees as being amenable to alcohol screening as part of their regular occupation health check. There is also growing support within the industrial sector for banning alcohol consumption across the working day, with 80% backing the idea in principle[ii].
(Health gain notation – 2 *"likely to be beneficial"*)

i. Hermansson MSW, Knutsson, A Ronnberg, S, Brandt L. Feasibility of brief intervention in the workplace for the detection and treatment of excessive alcohol consumption. *International Journal of Occupational and Environmental Health* 1998; **4(2)**: 71-78
(Type III evidence – screening intervention of 327 employees)

ii. Measure of concern. *Personnel Today*. 1995; **6 June**: 31-32
(Type IV evidence – survey during 1995 of 261 personnel managers and directors, carried out by Alcohol Concern and Personnel Today)

2.6 Community based approaches

2.6a. Community-based interventions have demonstrated some effectiveness[i]. The Mid Western Prevention Project targeted at high risk adolescents, demonstrated reductions in alcohol use for up to 1.5 years[ii]. Similarly, in a 5 year project designed to reduce alcohol-involved injuries, effectiveness was demonstrated by 78 fewer alcohol-involved traffic crashes as a result of the drinking and driving component alone (approximately a 10% reduction); a significant reduction in under age sales of alcohol, i.e. off-premises outlets sold to minors about one half as often as in comparison communities; increased implementation of responsible beverage service policies by bars and restaurants and increased adoption of local ordinances and regulations to reduce concentration of alcohol outlets[iii].

Suggested components are: community involvement, school programmes, parental programmes, local information campaigns, leisure, and employment projects as well as attempts to limit the availability of alcohol and regulate the marketing and sales practices of local merchants[i, iv, v].
(Health gain notation - 2 *"likely to be beneficial"*)

i. Gorman DM, Speer PW. Preventing alcohol abuse and alcohol related problems through community interventions: A review of evaluation studies. *Psychology and Health* 1996; **11**: 95-131
(Type I evidence – systematic review of 8 community-based studies)

ii. Chou CP, Montgomery S, Pentz M et al. Effects of a community–based prevention program on decreasing drug use in high risk adolescents. *American Journal of Public Health* 1998; **88(6)**: 944-948
(Type II evidence – randomised controlled trial of 3412 students)

iii. Holder H, Saltz RF, Grube JW, Treno AJ, Reynolds RI, Voas RB, Gruenewald PJ. Summing up: lessons from a comprehensive community prevention trial. *Addiction* 1997; **92(suppl.2)**: S293-301
(Type III evidence – non randomised community trial)

iv. Holder H, Saltz RF, Grube JW, Voas RB, Gruenewald PJ, Treno AJ. A community prevention trial to reduce alcohol-involved accidental injury and death: overview. *Addiction* 1997; **92(suppl.2)**: S155-171.
(Type III evidence – non randomised community trial)

iv. Caswell S, Gilmore L, Maguire V, Ransom R. Changes in public support for alcohol policies following a community based campaign; *British Journal of Addiction* 1989; **84**: 515–522
(Type V evidence – expert opinion)

v. Botvin GJ, Botvin EM. School-based and community-based prevention approaches, in *Substance Abuse: a Comprehensive Textbook*. Second edition edited by JH Lowinson, P Rruiz, RB Millman and JG Langrod. Philadelphia: Lippincot, Williams and Wilkins, 1992, pp 910-927
(Type V evidence – expert opinion)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

2.7 Settings

2.7a. Interventions that target drugs as well as alcohol should take account of the **context of misuse**, should take account of attitudes to substances and should **target the specific needs** of individuals or target groups[i-v].

Other characteristics associated with effective **school-based interventions** were:-

- Intensive programmes in primary and secondary schools, using interactive methods with follow up booster sessions[i].
- Programme development based on a needs assessment, including social influence and skill training, and supported by other elements such as parental training, local media and involvement of community groups[i, iv, v].
- Credible messages and messengers (i.e. avoiding delivery by uniformed police officers)[i].
- Attention to the drinking patterns and circumstances which cause harm (the risks of intoxication, multiple drug use, unprotected sex, accidents and injuries/driving). In particular, interventions should focus on those who are already experimenting with drugs who may progress to regular use[i, iii, v].

Caveat: Research from the USA indicates that interactive programmes, in particular those that employ peer education are the most effective. How far this finding transfers to European cultures is relatively untested[ii] .

i. *Health Promotion with Young People for Prevention of Substance Misuse.* Health Promotion Effectiveness Review. London: Health Education Authority, 1997
http://www.hea.org.uk/research/download/ereview5.html [accessed 3.3.00]
(Type I evidence – systematic review)

ii. Tobler NS, Stratton H. Effectiveness of school-based drug prevention programmes: a meta analysis of the research. *Journal of Primary Prevention* 1997; **18(1)**: 71-128
(Type I evidence – systematic review and meta-analysis of 120 programmes)

iii. May C. Research on alcohol education for young people: a critical review of the literature. *Health Education Journal* 1991; **50(4)**: 195-1999
(Type IV evidence – non-systematic review of observational studies)

iv. Gorman DM. Do school-based social skills training programmes prevent alcohol use among young people? *Addiction Research* 1996; **4(2)**: 191-210
(Type IV evidence – review of 12 evaluation studies)

v. Anderson K, Plant M. Associations between drinking, smoking and illicit drug use among adolescents in the Western Isles of Scotland, Implications for harm minimisation. *Journal of Substance Misuse* 1998; **3(1)**:13-20
(Type IV evidence – Survey, carried out in 1994, of 804 school pupils aged 13-16 years)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

2.7b. A systematic review of **alcohol misuse prevention programmes for young people** concluded that a lack of reliable evidence meant that no one type of prevention programme could be recommended[i].
(Health gain notation - 4 *"unknown"*)

The review recommended that the design of evaluation in alcohol intervention needs to be improved so that more reliable evidence of the effectiveness of different approaches which target young peoples' alcohol misuse may be generated.

The *evidence*

i. Foxcroft D, Lister Sharp D, Lowe G. Alcohol misuse prevention for young people: a systematic review reveals methodological concerns and lack of reliable evidence of effectiveness. *Addiction* 1997; **92(5)**: 531-537
(Type I evidence – systematic review of 33 studies, most with methodological shortcomings)

2.8 Supportive economic and environmental measures

2.8a. **Taxation** of alcohol is an effective environmental mechanism for reducing alcohol consumption. Approximately 10% increase in price leads to approximately a 5% decrease in beer consumption, a 7.5% decrease in wine and 10% decrease in spirit consumption. A 10% decrease in per capita consumption will be reflected in about a 20% decrease in male alcohol-related mortality and a 5% decrease in fatal accidents, suicides and homicides in the whole population[i].

Pricing is the measure most likely to have the biggest and swiftest impact on the drinking habits of young people[ii,iii,iv].
(Health gain notation - 1 *"beneficial"*)

i. Harkin AM, Anderson P, Lehto J. World Health Organisation Regional Office for Europe. *Alcohol in Europe - a Health Perspective*. Copenhagen: WHO, 1995
(Type V evidence – expert opinion)

ii. Raistrick D, Hodgson RJ, Ritson B (eds.); Society for the Study of Addiction. *Tackling Alcohol Together. The Evidence Base for a UK Alcohol Policy*. London: Free Association Books, 1999
(Type V evidence – expert opinion)

iii. Coate D, Grosman M. Effects of alcoholic beverage prices and legal drinking ages on youth alcohol use. *Journal of Law and Economics* 1988; **31**: 145-171
(Type IV evidence – survey of 1761 youths aged 16-21)

iv. Ponicki W, Hoder HD, Gruenewald PJ, Romelsjo A. Altering alcohol price by ethanol content: results from a Swedish tax policy in 1992. *Addiction* 1997; **92(7)**: 859–870
(Type IV evidence – observational study following a taxation change)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
2.8b. Raising the legal drinking age has been shown to have significant results. One study revealed an 18% reduction in late night single vehicle crashes and a 31% reduction in police reported alcohol related traffic crashes among 18 to 20 year olds[i]. (Health gain notation - 2 *"likely to be beneficial"*) **Caveat:** This study was carried out in the USA where the age at which it becomes legal to drive and the age at which it becomes legal to drink are different from the UK.	**i.** Wagenaar AC. Research affects public policy: the case of the legal drinking age in the United States. *Addiction* 1993; **88 (supplement)**: 75–81 (Type IV evidence – non-systematic review of observational studies)
2.8c. Enforcing the existing licensing legislation had an impact on the level of alcohol related arrests[i]. (Health gain notation - 2 *"likely to be beneficial"*)	**i.** Jeffs BW, Saunders WM. Minimising alcohol related offences by enforcement of the existing licensing legislation. *British Journal of Addiction* 1983; **78**: 67-77 (Type IV evidence – summary of two police studies (enforcement and arrest) in one town, population size 60,000)
2.8d. There is a clear relationship between the amount of alcohol consumed and the **type and location of setting.** One study has demonstrated that music and dancing venues were found to be the most likely to be associated with the highest levels of alcohol consumption[i]. (Health gain notation - 2 *"likely to be beneficial"*)	**i.** Casswell S, Zhang JF, Wyllie A. The importance of amount and location of drinking for the experience of alcohol related problems. *Addiction* 1993; **88**: 1527-1534 (Type IV evidence – survey of 1680 people in New Zealand)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

2.8e. Responsible **server intervention strategies** are an effective intervention, especially targeting those who are high risk (male, single and under 25 years and those already drunk)[i,ii].
(Health gain notation - 2 *"likely to be beneficial"*)
Note that evaluations of programs recommend training for licensees and managers and not just bar staff, alongside skills to deal with intoxicated customers[i, ii].

i. Lang E, Stockwell T, Rydon P, Lockwood A. Drinking settings and problems of intoxication. *Addiction Research* 1995; **3(2)**: 141-149
(Type IV evidence – random household survey of 1160 adults in Perth, Australia)

ii. Plant M, Single E, Stockwell T. Prevention where alcohol is sold and consumed: server intention and responsible beverage service in *Alcohol: Minimising the Harm. What Works?* London: Free Association Books, 1997
(Type V evidence – expert opinion)

2.8f. **Simple product labelling/warnings,** are unlikely to cause behaviour change. However, it is recommended that standard unit labelling will benefit those drinkers who are motivated to count their drinks whether for health, road safety, personal safety or economic reasons. It is also worth noting that there is a marked preference for unit labels which are accompanied by graphics or symbols of some kind. However, for unit labelling to have its maximum impact it may be necessary to combine the introduction of such labelling with a public education campaign explaining the concept[i, ii].
(Health gain notation - 2 *"likely to be beneficial"*)

i. Stockwell T, Single E. Standard unit in labelling of alcohol containers in Plant M, Single E, Stockwell T. *Alcohol: Minimising the Harm. What Works?* London: Free Association Books, 1997
(Type V evidence – expert opinion)

ii. Anderson P, Babor TF and Edwards G et al. (eds). *Alcohol Policy and the Public Good.* Oxford: Open University Press, 1994.
(Type V evidence – expert opinion)

2.8g. There is laboratory and observational evidence that **toughened beer glasses** are safer and their widespread use will result in fewer facial injuries in assaults and accidental hand injuries in bar staff[i].
(Health gain notation - 2 *"likely to be beneficial"*)

i. Shepherd J. Preventing injuries from bar glasses. *British Medical Journal* 1994; **308**: 932-933
http://www.bmj.com/cgi/content/full/308/6934/932
[accessed 3.3.00]
(Type IV evidence – editorial citing observational studies)

3 FOOD AND HEALTH (INCLUDING OVERWEIGHT AND OBESITY)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The relationship between food and health is significant. Diet plays an important part in both promoting good health and well-being, and in the development of a number of health problems including obesity, coronary heart disease and cancer. This chapter considers interventions to improve the diet of the general population, and nutritional interventions for overweight and obesity.

Caveat: In common with other topics in this bulletin, there are few well-designed experimental studies which evaluate the effectiveness of health promotion interventions to promote healthy eating. An appraisal of those that do exist is further hampered by the wide ranging outcomes identified by different interventions i.e. changes in knowledge, changes in dietary intake, food choices and biochemical indicators of nutrient status. This chapter draws largely from the systematic reviews commissioned by the Health Education Authority into the effectiveness of interventions to promote healthy eating in different population groups. Readers are encouraged to seek out these reviews. The majority of studies cited in these reviews are from the US, many related to the substantial Women's Infants and Child (WIC) Headstart and other nationally funded programmes which included an educational component in conjunction with food vouchers/supplies. In none of the studies is cost-effectiveness data presented; where positive effects are shown, sufficient information is not provided to make judgements about whether the size of the effect is sufficient to be significant in relation to the cost of the intervention.

The *statements*	The *evidence*
3.1 Diet and health	
3.1a. A **varied diet** that meets the dietary reference values for energy and nutrients will be beneficial to health[i]. (Health gain notation – 1 *"beneficial"*)	**i.** Department of Health. *Dietary Reference Values for Food Energy and Nutrients for the United Kingdom.* Report on Health and Social Subjects No. 41. London: The Stationery Office, 1991 (Type V evidence – expert opinion)
3.1b. It is estimated that, on average, a third of **cancers** could be prevented by changes in diet[i]. (Health gain notation – 1 *"beneficial"*) A diet which is **high in fibre** (fruit & vegetables) **and whole grain cereal** and **low in fat** has the potential to prevent a number of cancers, including colorectal and breast cancer. (Health gain notation – 2 *"likely to be beneficial"*)	**i.** Department of Health. Committee on Medical Aspects of Food and Nutrition Policy. Working Group on Diet and Cancer. *Nutritional Aspects of the Development of Cancer.* Report on the Health and Social Subjects No. 48. London: The Stationery Office, 1998 (Type V evidence – expert opinion based on observational studies)
3.1c A diet **high in fat** (particularly saturated fat) and **high in salt** is associated with an increased risk of **coronary heart disease**[i]. (Health gain notation – 6 *"likely to be harmful"*)	**i.** Department of Health. *Diet and Cardiovascular Disease.* London: The Stationery Office, 1994 (Type V evidence – expert opinion based on observational and interventional studies)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
3.1d. A diet **rich in fruit and vegetables** is associated with a decreased risk of **coronary heart disease**[i,ii]. (Health gain notation – 2 *"likely to be beneficial"*)	**i.** Department of Health. *Diet and Cardiovascular Disease.* London: The Stationery Office, 1994 (Type V evidence – expert opinion based on observational and interventional studies) **ii.** National Heart Forum. *Preventing Coronary Heart Disease – the Role of Antioxidants, Vegetables and Fruit.* London: The Stationery Office, 1997 (Type V evidence – expert opinion based on observational and interventional studies)
3.1e. A **reduction** in the consumption of non-milk extrinsic sugars is associated with reduced levels of **tooth decay**[i]. (Health gain notation – 1 *"beneficial"*)	**i.** Department of Health. *Dietary Sugars and Human Disease.* London: The Stationery Office, 1989 (Type V evidence – expert opinion based on observational and interventional studies)
3.1f. In Wales only **23.9%** of adults eat **green vegetables or salad** six or seven days a week[i].	**i.** The National Assembly for Wales. *Welsh Health Survey 1998. Results of the Second Welsh Health Survey.* Cardiff: Government Statistical Service, 1999 (Type IV evidence – survey of 50,023 adults in Wales, representing one in every 45 adults. Adjusted overall response rate, 61%)
3.1g. People who are **obese** (Body Mass Index, BMI>30) or **overweight** (BMI>25) have a higher risk of disease including **coronary heart disease, diabetes, hypercholesterolaemia, hypertension, bone and joint disorders.** The risk of disease increases with increasing BMI[i,ii,iii]. Men and women with a waist circumference greater than 94cm and 80cm respectively are at increased risk and men and women with a waist circumference greater than 102cm and 88cm respectively are at substantial risk[iv].	**i.** The prevention and treatment of obesity. *Effective Health Care* 1997; **3(2)** http://www.york.ac.uk/inst/crd/ehc32.htm [accessed 10.3.00] (Type IV evidence – systematic review citing 2 observational studies and 2 reviews of observational studies) **ii.** Department of Health. Nutrition and Physical Activity Task Force. *Obesity: Reversing the Increasing Problem of Obesity in England.* London: The Stationery Office, 1995 (Type V evidence – expert opinion) **iii.** *Health Evidence Bulletins – Wales. Cardiovascular Diseases.* Cardiff: Welsh Office, 1998 http://hebw.uwcm.ac.uk/cardio/index.html [accessed 10.3.00] (Type IV evidence – prospective cohort studies) **iv**. Scottish Intercollegiate Guidelines Network (SIGN) *Obesity in Scotland. Integrating Prevention with Weight Management.* SIGN Guidelines No 8. Pilot Edition, November 1996. http://www.sign.ac.uk [accessed 10.3.00] (Type IV evidence – systematic review citing 2 observational studies)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
3.1h. Intra-abdominal obesity assessed by GHR (waist circumference divided by height) or WHR (waist hip ratio), carries a greater risk of cardiovascular disease, hypertension and non-insulin dependent diabetes than other types of obesity (eg hips, thighs, peripheral areas)[i,ii,iii].	**i.** The prevention and treatment of obesity. *Effective Health Care* 1997; **3(2)** http://www.york.ac.uk/inst/crd/ehc32.htm [accessed 10.3.00] (Type IV evidence – systematic review citing Colhoun H, Prescott-Clark P, eds. *Health Survey for England, 1994. A survey carried out for the Department of Health Vol. 1.* London: The Stationery Office, 1996) **ii.** Department of Health. Nutrition and Physical Activity Task Force. *Obesity: Reversing the Increasing Problem of Obesity in England.* London: The Stationery Office, 1995 (Type V evidence – expert opinion) **iii.** *Health Evidence Bulletins – Wales. Cardiovascular Diseases.* Cardiff: Welsh Office, 1998 http://www.hebw.uwcm.ac.uk/cardio/index/html [accessed 10.3.00] (Type IV evidence – prospective cohort studies)
3.1i. In Wales **55.2%** of adults are **overweight or obese** with a Body Mass Index (BMI) of 25 or greater[i].	**i.** The National Assembly for Wales. *Welsh Health Survey 1998. Results of the second Welsh Health Survey.* Cardiff: Government Statistical Service, 1999 (Type IV evidence – survey of 50,023 adults in Wales, representing one in every 45 adults. Adjusted overall response rate, 61%)
3.2 General health education	
3.2a. Healthy eating interventions targeted at a range of population groups in a range of settings are effective in achieving dietary change. The characteristics associated with **effective interventions** were[i]: ■ A focus on diet or diet and exercise only. ■ A behaviourally-based theoretical model. ■ A degree of personalisation of the intervention, usually by a health professional. ■ The provision of feedback. ■ Active involvement of influential people eg family, community leaders. ■ Changes in local environment and policy for long-term change. (Health gain notation 2 – *"likely to be beneficial"*)	**i.** Roe L, Hunt P, Bradshaw H and Rayner M. *Health Promotion Interventions to Promote Healthy Eating in the General Population: a Review.* Health Promotion Effectiveness Reviews 6. London: Health Education Authority, 1997. http://www.hea.org.uk/research/download/ereview6.html [accessed 10.3.00] (Type I evidence – systematic review of 76 intervention studies)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
3.2b. Traditional **group based teaching** has a positive impact on knowledge and/or self reported dietary behaviour in a number of population groups including the under 5s, pregnant women and elderly people in community settings[i,ii,iii]. (Health gain notation 2 – *"likely to be beneficial"*)	**i.** Van Teijingen E, Wilson B, Barry N, Ralph A, McNeill G, Graham W and Campbell. *Effectiveness of Interventions to Promote Healthy Eating in Pregnant Women and Women of Childbearing Age: a Review.* Health Promotion Effectiveness Reviews 11. London. Health Education Authority 1998. http://www.hea.org.uk/research/download/ereview11.htm [accessed 10.3.00] (Type I evidence – systematic review of 4 randomised controlled trials) **ii.** Tedstone A, Aviles M, Shetty P and Daniels L. *Effectiveness of Interventions to Promote Healthy Eating in Pre-school Children aged 1 to 5 Years: a Review.* Health Promotion Effectiveness Reviews 10. London. Health Education Authority 1998. http://www.hea.org.uk/research/download/ereview10.htm [accessed 10.3.00] (Type I evidence – systematic review of 14 intervention studies of variable quality) **iii.** Fletcher A and Rake C. *Effectiveness of Interventions to Promote Healthy Eating in Elderly People Living in the Community: a Review.* Health Promotion Effectiveness Reviews 8. London. Health Education Authority. 1998. http://www.hea.org.uk/research/download/ereview8.htm [accessed 10.3.00] Type I evidence – systematic review of 8 intervention studies of variable quality)
3.2c. Interventions that target the **mothers** of children under 5 years of age, using **educational interventions,** have positive effects on the mothers' knowledge, behaviour and the children's diet[i]. (Health gain notation 2 – *"likely to be beneficial"*) **Caveat:** Includes US studies as part of WIC and Headstart programmes that include provision of food vouchers, effect of individual components not measured.	**i.** Tedstone A, Aviles M, Shetty P and Daniels L. *Effectiveness of Interventions to Promote Healthy Eating in Pre-School Children aged 1 to 5 Years: a Review.* Health Promotion Effectiveness Reviews 10. London: Health Education Authority, 1998. http://www.hea.org.uk/research/download/ereview10.htm [accessed 10.3.00] (Type III evidence – systematic review citing 3 non-randomised intervention studies)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements* | The *evidence*

3.3 Healthcare based interventions

3.3a. Interventions to promote **breast feeding** are successful in increasing initiation and duration of breast feeding. The characteristics of effective interventions are that they span the ante and post natal periods, are specific to breast-feeding and include multiple contacts with either a health professional or lay counsellor[i].
(Health gain notation 1 – *"beneficial"*)

i. Tedstone A, Dunce N, Aviles M, Shetty P, Daniels L. *Effectiveness of Interventions to Promote Healthy Feeding in Infants Under One Year of Age: a Review.* Health Promotion Effectiveness Reviews 9. London: Health Education Authority, 1998.
http://www.hea.org.uk/research/download/ereview9.htm
[accessed 10.3.00]
(Type I evidence – systematic review of 20 intervention studies of variable quality)

3.3b. Interventions through primary healthcare, using **nurse led intervention** via health check or computer tailored mailed intervention, showed a reduction of blood cholesterol levels (2-3%) or dietary fat intake (1.4-4%) sustained for four months to three years after the intervention[i].
(Health gain notation 2 – *"likely to be beneficial"*)

i. Roe L, Hunt P, Bradshaw H and Rayner M. *Health Promotion Interventions to Promote Healthy Eating in the General Population: a Review.* Health Promotion Effectiveness Reviews 6. London: Health Education Authority, 1997
http://www.hea.org.uk/research/download/ereview6.html
[accessed 10.3.00]
(Type I evidence – systematic review citing 7 randomised controlled trials, 4 of good quality)

3.3c. Interventions delivered through a **health check,** including a nutrition component and using a feedback/goal setting approach can lead to self reported dietary changes in elderly people[i].
(Health gain notation 2 – *"likely to be beneficial"*)
Caveat: These studies are US based and delivered through health insurance schemes.

i. Fletcher A and Rake C. *Effectiveness in Interventions to Promote Healthy Eating in Elderly People Living in the Community: a Review.* Health Promotion Effectiveness Reviews 8. London. Health Education Authority. 1998.
http://www.hea.org.uk/research/download/ereview8.htm
[accessed 10.3.00]
(Type I evidence – systematic review citing 4 randomised controlled trials and 1 cohort study, of variable quality)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

3.4 School-based interventions

3.4a. School-based interventions were assessed as part of a systematic review[i]. Twenty-one studies were included of which seven were judged to be of good quality. The range of interventions used centred on traditional classroom based education supplemented by one or more other components e.g.parental/home involvement, modification of school meal system, health screening including cholesterol testing. Four of the seven good quality studies and 10 of the total showed a positive effect on either dietary intake or blood cholesterol.

A number of reviews of school-based nutrition education programmes have drawn similar conclusions on the characteristics of successful programmes[i, ii, iii]. These include the following:

- Effective programmes are behaviourally focused.
- Interventions are more effective when derived from appropriate theory and research.
- The greater the level of intensity of the programme the greater the effect.
- Family involvement is beneficial for younger children.
- Self evaluation/assessment and feedback is an effective component of programmes for older children.
- Interventions in the wider school environment should form a component of the programme.
- Interventions in the wider community can enhance school programmes.

(Health gain notation – 2 *"likely to be beneficial"*)

i. Roe L, Hunt P, Bradshaw H and Rayner M. *Health Promotion Interventions to Promote Healthy Eating in the General Population: a Review.* Health Promotion Effectiveness Reviews 6. London: Health Education Authority, 1997. http://www.hea.org.uk/research/download/ereview6.html [accessed 10.3.00]
(Type I evidence – systematic review of 21 intervention studies of variable quality)

ii. Contento I, Balch GI, Maloney SK *et al.* The effectiveness of nutrition education and implication for nutrition education policy, programs and research: A review of research. *Journal of Nutrition Education* 1995; **27:** 277-419.
(Type I evidence – systematic review of 43 intervention studies)

iii. Lytle L and Achterberg C. Changing the diet of America's children: what works and why. *Journal of Nutrition Education* 1995; **27:** 250–260
(Type I evidence – systematic review of 43 intervention studies)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*

3.5 Workplace interventions

3.5a. Interventions set in the **Workplace using diet only and multi-factoral approaches** have a positive effect on reducing dietary fat intake (1%–16% of energy) and blood cholesterol levels (2.5%–10%)[i].
(Health gain notation 2 – *"likely to be beneficial"*)

i. Roe L, Hunt P, Bradshaw H and Rayner M. *Health Promotion Interventions to Promote Healthy Eating in the General Population: a Review.* Health Promotion Effectiveness Reviews 6. London: Health Education Authority, 1997
http://www.hea.org.uk/research/download/ereview6.html
[accessed 10.3.00]
(Type I evidence – systematic review citing 9 randomised controlled trials, 4 of which were assessed as good quality)

3.6 Community-based interventions

3.6a. *There are a number of **community-based interventions** that appear promising, for example food co-operatives, bulk buy schemes, cooking programmes and community cafes. At present there is little good quality evaluation of these interventions. There is a need for further research in this area.*

3.7 Supportive environments

3.7a. The use of **supermarket based interventions** e.g. provision of shelf signs, point of sale information appears promising in positively effecting food purchases in the long-term (1% – 2% increase in sales) *but require further exploration*[i].
(Health gain notation 2 – *"likely to be beneficial"*)

i. Roe L, Hunt P, Bradshaw H and Rayner M. *Health Promotion Interventions to Promote Healthy Eating in the General Population: a Review.* Health Promotion Effectiveness Reviews 6. London: Health Education Authority, 1997
http://www.hea.org.uk/research/download/ereview6.html
[accessed 10.3.00]
(Type I evidence – systematic review citing 8 intervention studies of which 4, 1 randomised controlled trial and 3 cohort studies, were assessed as good quality)

3.7b. Interventions in **catering**, through passive (modification of recipes and choices offered) and active (promotion of particular choices) methods, have a positive effect on nutrient intake/food choices made at the catering outlet for the intervention period. The effect on the overall diet is unknown[i].
(Health gain notation 2 – *"likely to be beneficial"*)

i. Roe L, Hunt P, Bradshaw H and Rayner M. *Health Promotion Interventions to Promote Healthy Eating in the General Population: a Review.* Health Promotion Effectiveness Reviews 6. London: Health Education Authority, 1997
http://www.hea.org.uk/research/download/ereview6.html
[accessed 10.3.00]
(Type I evidence – systematic review of 15 intervention studies)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
3.8 Prevention of obesity	
3.8a. Family therapy (defined as a model of treatment involving the family) may be more effective than conventional diet/exercise treatments or no intervention, at preventing progression of obesity in children (10-11 years of age). (Increase in BMI in intervention group 5.1% vs 12% in control group, p=0.02; children with severe obesity in intervention group 5% vs 29% in control group, p=0.02)[i]. (Health Gain Notation 2 – *"likely to be beneficial"*)	**i.** The prevention and treatment of obesity. *Effective Health Care* 1997; **3(2)** [accessed 10.3.00] (Type I evidence – systematic review citing one randomised controlled trial: Flodmark CE, Ohlsson T, Ryden O, Sveger T. Prevention of progression to severe obesity in a group of obese school children treated with family therapy. *Pediatrics* 1993; **91:** 880–884)
3.9 Treatment of obesity	
3.9a. Interventions to **reduce sedentary behaviour in children** in combination with moderate changes in diet and lifestyle which avoid restrictive diets and exercise programmes are effective at reducing obesity in children[i]. (Health gain notation 2 – *"likely to be beneficial"*)	**i.** The prevention and treatment of obesity. *Effective Health Care* 1997; **3(2)** http://www.york.ac.uk/inst/crd/ehc32.htm [accessed 10.3.00] (Type I evidence – systematic review of 11 randomised controlled trials; conclusions drawn from 2 good quality trials)
3.9b. Interventions to reduce obesity in adults which include **more than one approach in combination** (behavioural therapy, exercise, diet modification) are more likely to be effective than single interventions (minimum 1 year treatment and follow up)[i]. (Health gain notation 2 – *"likely to be beneficial"*) **Clinical guidelines** for the prevention, assessment and management of obesity are available and should form the basis of weight management interventions[ii, iii]. (Health gain notation 2 – *"likely to be beneficial"*)	**i.** The prevention and treatment of obesity. *Effective Health Care* 1997; **3(2)** http://www.york.ac.uk/inst/crd/ehc32.htm [accessed 10.3.00] (Type I evidence – systematic review citing at least 8 randomised controlled trials in addition to other intervention studies) **ii.** Scottish Intercollegiate Guidelines Network (SIGN) *Obesity in Scotland. Integrating Prevention with Weight Management.* SIGN Guidelines No 8. Pilot Edition, November 1996 http://www.sign.ac.uk [accessed 10.3.00] (Type I evidence – guideline based on a systematic review) **iii.** National Heart, Lung and Blood Institute. *Clinical Guidelines on the Identification, Evaluation and Treatment of Overweight and Obesity in Adults.* Bethesda: Maryland, 1998 http://www.nhlbi.nih.gov/guidelines/index.htm [accessed 10.3.00] (Type I evidence – guideline based on a systematic review including 394 randomised controlled trials)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

3.9c. Very Low Calorie Diets (800 kcal/d; 3350kj/d or less) can be effective at promoting significant short-term weight loss in obese patients. However, long-term maintenance of weight loss suggests no benefit over other dietary treatments. Incorporation of behavioural modification and exercise in treatment programmes may improve maintenance[i].
(Health gain notation 3 – *"trade off between beneficial and adverse effects"*)

The *evidence*

i. National Task Force on the Prevention and Treatment of Obesity. Very Low Calorie Diets. *Journal of the American Medical Association* 1993; **270:** 967–974.
(Type III evidence – systematic review of controlled clinical trials and other studies)

3.9d. The role of **health professionals** in the management of obesity and the most appropriate way of developing knowledge and skills in this area and the motivation to address the issue is unknown[i]. The most appropriate service model for the management of obesity is unknown[i ii].
(Health gain notation 4 – *"unknown"*)
Additional research in this field is required

i. Harvey EL, Glenny A, Kirk SLF, Summerbell CD. Improving health professionals' management and the organisation of care for overweight and obese people. Cochrane Database of Systematic Reviews. *Cochrane Library* 1999 Issue 2
http://www.update-software.com/ccweb/cochrane/revabstr/ab000984.htm [accessed 10.3.00]
(Type I evidence – systematic review of 12 intervention studies, 3392 patients in all, including 3 randomised controlled trials; also published as Harvey EL, Glenny AM, Kirk SFL, Summerbell CD. A systematic review of interventions to improve health professionals' management of obesity. International Journal of Obesity 1999; 23: 1213-1222)

ii. Hughes J, Martin S. The Department of Health's project to evaluate weight management services. *Journal of Human Nutrition and Dietetics* 1999; **12 (Suppl.1):** 1–8.
(Type IV evidence - descriptive study of the findings of the evaluation of 13 weight management services in England. Information on the nature of the individual services or the evaluation methods used was not provided)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
3.10 Weight maintenance	
3.10a. Weight loss programmes should include mechanisms for **longer-term follow-up and maintenance** to minimise regain[i]. (Health gain notation 2 – *"likely to be beneficial"*)	**i.** The prevention and treatment of obesity. *Effective Health Care* 1997; **3(2)** http://www.york.ac.uk/inst/crd/ehc32.htm [accessed 10.3.00] (Type I evidence – systematic review of 21 randomised controlled trials)
3.10b. Combined treatment and maintenance programmes including behavioural therapy, relapse prevention and telephone or mail contact are effective at promoting weight maintenance[i]. (Health gain notation 1 – *"beneficial"*)	**i.** The prevention and treatment of obesity. *Effective Health Care* 1997; **3(2)** http://www.york.ac.uk/inst/crd/ehc32.htm [accessed 10.3.00] (Type I evidence – systematic review of 11 randomised controlled trials)
3.10c. The evidence regarding the negative effects of **weight cycling** (repeated loss and gain of weight) is not sufficient to override the potential benefits to obese patients of weight loss. However, consideration should be given to weight maintenance as a component of weight loss programmes[i]. (Health gain notation 2 – *"likely to be beneficial"*)	**i.** National Task Force on the Prevention and Treatment of Obesity. Weight cycling. *Journal of the American Medical Association* 1994; **272:** 1196–1202 (Type III evidence – systematic review of 28 (uncontrolled) interventional and observational studies)

4 UNINTENDED TEENAGE PREGNANCY

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The rates of teenage pregnancy in Wales are the highest in Western Europe and are a cause for concern, particularly in view of recent increases in conceptions to girls under 16. There are links between teenage pregnancy and social exclusion, and early pregnancy is associated with a number of risks for mother and child. Many of the interventions aimed at reducing unintended teenage pregnancy also contribute to reducing the incidence of sexually transmitted infections.

The *statements*	The *evidence*
4.1 Background	
4.1a. The **UK** has the **highest rate of teenage conceptions** in Europe: three times that in Germany, four times that in France and seven times the Dutch rate[i].	**i.** Council of Europe. *Recent Demographic Developments in Europe.* Strasbourg: Council of Europe Publishing, 1997 (Type IV evidence – statistics)
4.1b. Within the UK, **Wales** has the highest rate of teenage conception[i].	**i.** Social Exclusion Unit. *Teenage Pregnancy. CM 4342.* London: The Stationery Office, 1999 (Type IV evidence – statistics)
4.1c. The **overall conception rate** for women in **Wales** has generally been lower in recent years than in England. In 1997, the rate per 1000 women aged 15-44 in Wales was 71.8, compared to 74.6 in England. However, the **rate for teenage conceptions** has remained consistently higher in Wales. In 1997, the rate per 1000 women aged 15-19 in Wales was 68.5, compared to 62.2 per 1000 for women of this age group in England[i,ii].	**i.** Welsh Office Statistical Directorate. *Statistical Brief SDB 64/98: Teenage Conceptions.* Cardiff: Welsh Office, 1998 (Type IV evidence – statistics) **ii.** Office of National Statistics. *Birth Statistics 1998.* Series FMI, No. 27. London: Stationery Office, 1999 (Type IV evidence – statistics)
4.1d. The **annual number of conceptions to girls under 16** in Wales is relatively small and variable. The number or rate for a single year should therefore be treated with caution. However, the rate in Wales has been rising quite sharply over the last three years. Although the annual rate has previously been in line with that for England, since 1992 the rate in Wales has been consistently higher and rising more rapidly. In 1997, the rate per 1000 women aged 13-15 was 10.3, compared with 8.8 in England[i,ii].	**i.** Welsh Office Statistical Directorate. *Statistical Brief SDB 64/98: Teenage Conceptions.* Cardiff: Welsh Office, 1998 (Type IV evidence – statistics) **ii.** Office of National Statistics. *Birth Statistics 1998.* Series FMI, No. 27. London: Stationery Office, 1999 (Type IV evidence – statistics)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
4.1e. Overall, rates of teenage pregnancy are highest in the areas of **greatest deprivation** and among the most vulnerable young people, including those in care and those who have been excluded from school[i,ii]. The Acheson Report concluded that the risk of pregnancy is increased in association with a number of social, socioeconomic and individual factors, many of which are more common in people experiencing disadvantage – for example, low educational attainment, poor housing[iii].	**i.** Social Exclusion Unit. *Teenage Pregnancy. CM 4342.* London: The Stationery Office, 1999 (Type IV evidence – statistics) **ii.** Office of National Statistics. Conceptions to women under 18 in England and Wales, 1995-1997: Local authority areas. *Population Trends* 1999; **97**: 83-86 (Type IV evidence – statistics) **iii.** Scientific Advisory Group. Acheson D (Chairman). *Independent Inquiry into Inequalities in Health.* London: The Stationery Office, 1998. (Type V evidence – expert opinion based on commissioned papers, submissions and other presentations to the enquiry)
4.1f. Of those young women who do get pregnant, nearly half of under 16s and more than a third of 16 and 17 year olds opt for **termination**[i]. In general, areas in Wales with high teenage conception rates also have the lowest abortion rates[ii].	**i.** Office of National Statistics. *Birth Statistics 1998.* Series FMI, No. 27. London: ONS, 1999 (Type IV evidence – statistics) **ii.** Office of National Statistics. Conceptions to women under 18 in England and Wales, 1995-1997: Local authority areas. *Population Trends* 1999; **97**: 83-86 (Type IV evidence – statistics)
4.1g. For women living in **Wales**, the rate of **terminations** among young women under 15 increased from 3.1 per 1,000 in 1995 to 3.92 in 1997, and the rate for 15 year-olds increased from 7.9 to 9.0. Rates in England were higher than those in Wales for all age groups except for those aged 15 and under[i].	**i.** Office for National Statistics. *Abortion Statistics 1998.* Series AB, No. 25. London: ONS, 1999. (Type IV evidence – statistics)
4.2 Adverse health and social effects	
4.2a. Teenage pregnancy is associated with **increased risk of poor social, economic and health outcomes** for both mother and child[i].	**i.** NHS Centre for Reviews and Dissemination. Preventing and reducing the adverse effects of unintended teenage pregnancies. *Effective Health Care* 1997; **3(1)**: 1-12 http://www.york.ac.uk/inst/crd/ehc31.htm (Type IV evidence – systematic review of 8 observational studies)
4.2b. Teenage parents are more likely than their peers to live in poverty and unemployment[i].	**i.** Social Exclusion Unit. *Teenage Pregnancy. CM 4342.* London: The Stationery Office, 1999 (Type V evidence – expert opinion)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

4.2c. Teenage mothers **smoke** more during pregnancy than mothers of any other age. They are at increased risk of suffering **anaemia** and **pre-eclampsia.** On average, children born to teenage girls have **lower birth-weights**, increased risk of **infant mortality** and an increased risk of some **congenital abnormalities.** They are less likely to be breastfed and more likely to live in deprived circumstances. The daughters of teenage mothers have a higher chance of becoming teenage mothers themselves[i].

i. Botting B, Rosato M, Wood R. Teenage mothers and the health of their children. *Population Trends* 1998; **93**: 19-28
(Type IV evidence - well-designed longitudinal study using Office for National Statistics data)

4.3 Educational interventions

4.3a. **School-based sex education** plays an important role in the prevention of teenage pregnancy. Characteristics of successful sex education programmes include use of social learning theories; provision of factual, accurate information; inclusion of activities that address social or media influences on sexual behaviours; and practice of communication and negotiation skills[i,ii,iii]. The ways that young men and young women think and talk about sex vary and can also differ between social groups of young people. The needs and interests of young men should be addressed as well as those of young women[iv].

There is consistent evidence that providing sex and contraceptive education within school settings **does not lead to an increase in sexual activity** or incidence of pregnancy; rather, the provision of clear information about contraceptive methods and how and when to access contraceptive services appears to be important to the success of educational programmes[i,ii,iii].
(Health gain notation - 1 *"beneficial"*)

i. NHS Centre for Reviews and Dissemination. Preventing and reducing the adverse effects of unintended teenage pregnancies. *Effective Health Care* 1997: **3(1)**: 1-12
http://www.york.ac.uk/inst/crd/ehc31.htm
[accessed 10.3.00]
(Type I evidence – systematic review of 42 evaluations of educational programmes)

ii. Kirby D, Short L, Collins J, et al. School-based programs to reduce sexual risk behaviours: a review of effectiveness. *Public Health Reports* 1994: **109(3)**: 339-360
(Type I evidence - systematic review of 23 studies including 16 intervention studies)

iii. Grunseit A, Kippax S, Aggleton P, Baldo M, Slutkin G. Sexuality education and young people's sexual behaviour: a review of studies. *Journal of Adolescent Research* 1997; **12(4)**: 421-453
(Type I evidence - systematic review of 47 intervention studies including 11 randomised controlled trials)

iv. Aggleton P, Oliver C, Rivers K. *Reducing the Rate of Teenage Conceptions – The Implications of Research into Young People, Sex, Sexuality and Relationships.* London: Health Education Authority, 1998
(Type IV evidence – systematic review of observational studies)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
4.3b **Educational programmes promoting abstinence** have not been found to have any additional effect compared with the usual sex education programme either in delaying sexual activity or in reducing conceptions[i,ii]. (Health gain notation – 5 *"unlikely to be beneficial"*)	**i.** NHS Centre for Reviews and Dissemination. Preventing and reducing the adverse effects of unintended teenage pregnancies. *Effective Health Care* 1997: **3(1)**: 1-12 http://www.york.ac.uk/inst/crd/ehc31.htm [accessed 10.3.00] (Type I evidence – systematic review of 42 evaluations of educational programmes) **ii.** Kirby D, Short L, Collins J, et al. School-based programs to reduce sexual risk behaviors: a review of effectiveness. *Public Health Reports* 1994: **109(3)**: 339-360 (Type I evidence - systematic review of 23 studies including 16 intervention studies)
4.3c. Programmes which combine **sex education with access to contraceptive services** have been shown to be effective in increasing contraceptive use[i]. (Health gain notation - 1 *"beneficial"*) Young people's perceived barriers to services might be overcome through clinic staff or GP visits to schools, or through school visits to the contraceptive service[i]. (Health gain notation - 2 *"likely to be beneficial"*)	**i.** NHS Centre for Reviews and Dissemination. Preventing and reducing the adverse effects of unintended teenage pregnancies. *Effective Health Care* 1997: **3(1)**: 1-12 http://www.york.ac.uk/inst/crd/ehc31.htm [accessed 10.3.00] (Type I evidence – systematic review of 42 evaluations of educational programmes)
4.3d. Within health care settings, education programmes targeted at **young women presenting for emergency contraception** or with **negative pregnancy tests** may improve effective contraceptive use[i]. (Health gain notation - 2 *"likely to be beneficial"*)	**i.** NHS Centre for Reviews and Dissemination. Preventing and reducing the adverse effects of unintended teenage pregnancies. *Effective Health Care* 1997: **3(1)**: 1-12 http://www.york.ac.uk/inst/crd/ehc31.htm [accessed 10.3.00] (Type I evidence – systematic review of 42 evaluations of educational programmes)
4.4 Contraceptive services	
4.4a. The **costs** of providing **contraceptive and counselling** services to teenagers are far less than the health and social costs of unplanned pregnancy[i]. (Health gain notation - 1 *"beneficial"*)	**i.** NHS Centre for Reviews and Dissemination. Preventing and reducing the adverse effects of unintended teenage pregnancies. *Effective Health Care* 1997: **3(1)** http://www.york.ac.uk/inst/crd/ehc31.htm [accessed 10.3.00] (Type IV evidence – systematic review citing 2 cost-effectiveness studies)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

4.4b. There is an association between conception rates and the **level and type of contraceptive services** available locally[i], including the distance to the nearest youth-orientated family planning clinic[ii]. The effect of these services in terms of use and pregnancy rates appears to be stronger when they are provided by clinics orientated to the needs of young people. In order to attract young people, services need to be well-advertised, easily accessed outside school-hours (in terms of opening times and location), informal and confidential. They should be developed in collaboration with key statutory agencies, relevant voluntary organisations and community groups, and should be staffed by people trained to work with young people[i].
(Health gain notation - 1 *"beneficial"*)

The *evidence*

i. NHS Centre for Reviews and Dissemination. Preventing and reducing the adverse effects of unintended teenage pregnancies. *Effective Health Care* 1997: **3(1)**
http://www.york.ac.uk/inst/crd/ehc31.htm
[accessed 10.3.00]
(Type III evidence – systematic review citing more than 20 intervention and observational studies)

ii. Clements S, Stone N, Diamond I, Ingham R. Modelling the spatial distribution of teenage conception rates within Wessex. *The British Journal of Family Planning* 1998; **24**: 61-71
(Type IV evidence – relation of postcoded data for all teenage conceptions that occurred between 1991 and 1994, in the Wessex Regional Health Authority, to ward based population characteristics and indicators of accessibility to family planning services)

4.4c. **Hormonal emergency contraception** (the "post-coital pill") has an important role in the prevention of pregnancy with this age group because of the unplanned and sporadic nature of many teenagers' sexual activity. It is an inexpensive method of pregnancy prevention, and should be made more easily available. In order to maximise uptake of this method, there is a need for more publicity about emergency contraception. Programmes are needed to educate teenagers about the timing and availability of the post-coital pill; in addition, both young people and health professionals, including GPs, need more information about emergency contraception in order to reduce anxiety about its use and repeat use[i].
(Health gain notation - 1 *"beneficial"*)

i. NHS Centre for Reviews and Dissemination. Preventing and reducing the adverse effects of unintended teenage pregnancies. *Effective Health Care* 1997: **3(1)**: 1-12
http://www.york.ac.uk/inst/crd/ehc31.htm
[accessed 10.3.00]
(Type IV evidence – systematic review citing 6 observational studies)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

4.5 Antenatal care and social support

4.5a. Specialised **antenatal care programmes** for pregnant teenagers involving, for example, GPs, district nurses, health visitors and social workers are likely to improve health outcomes. These may also save resources for health, education and social services[i].
(Health gain notation - 2 *"likely to be beneficial"*)

i. NHS Centre for Reviews and Dissemination. Preventing and reducing the adverse effects of unintended teenage pregnancies. *Effective Health Care* 1997: **3(1)**: 1-12
http://www.york.ac.uk/inst/crd/ehc31.htm
[accessed 10.3.00]
(Type I evidence – systematic review citing 6 studies including a meta-analysis [Scholl TO, Hediger ML, Belsky DH. Prenatal care and maternal health during adolescent pregnancy: a review and meta-analysis. *Journal of Adolescent Health* 1994; **15**: 444-456])

4.5b. **Health visitors and social workers** can usefully provide targeted support for teenagers and their families during and after pregnancy. Programmes involving home visits and support from other young mothers, and home-based parenting schemes for teenagers who may be reluctant to attend clinics, may also be beneficial[i].
(Health gain notation - 2 *"likely to be beneficial"*)

i. NHS Centre for Reviews and Dissemination. Preventing and reducing the adverse effects of unintended teenage pregnancies. *Effective Health Care* 1997: **3(1)**: 1-12
http://www.york.ac.uk/inst/crd/ehc31.htm
[accessed 10.3.00]
(Type I evidence – systematic review citing 2 reviews of randomised controlled trials)

5 SEXUALLY TRANSMITTED INFECTIONS

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

Sexually transmitted infections (STIs) affect people of all ages in Wales. Incidence is greatest among people under 25, but older men and women are also at risk, particularly those who are entering new partnerships following the break up of a long-term relationship. These infections are an important source of reproductive ill health, but can be prevented by encouragement of safer sex practices. Many of the interventions aimed at reducing sexually transmitted infections also contribute to reducing unintended teenage pregnancy.

Prior to the advent of HIV, STI prevention received relatively little attention, and in recent years research has tended to focus on STIs in the context of HIV. In the absence of appropriate evidence relating to prevention of STIs other than HIV, and given the similarity of the behavioural interventions advocated both for HIV and general STI prevention, the HIV literature has been used to identify relevant evidence-based statements on risk reduction interventions.

The *statements*

The *evidence*

5.1 Background

5.1a. Sexually transmitted infections (STIs) are an **increasing cause of morbidity** among young adults in England and Wales, and rising rates among teenagers give particular cause for concern[i].

i. Nicoll A, Catchpole M, Cliffe S et al. Sexual health of teenagers in England and Wales: analysis of national data. *British Medical Journal* 1999; **318**: 1321-1322.
http://www.bmj.com/cgi/content/full/318/7194/1321 [accessed 10.3.00]
(Type IV evidence – statistics)

5.1b. Genital ***Chlamydia trachomatis*** infection is the commonest curable bacterial STI in England and Wales. Reported rates in Wales are highest among 20 to 24 year olds (212 per 100,000 men and 323 per 100,00 women), but rates are also high among 16-19 year old women (306 per 100,000 in 1997)[i,ii]. Levels of awareness of chlamydia are low with estimates of only 26% in 16-24 year olds in the general population[iii] and only 60% in one high-risk group[iv].

i. Communicable Disease Surveillance Centre. Sexually transmitted diseases quarterly report: genital *Chlamydia trachomatis* infection in England and Wales. *Communicable Disease Report* 1998; **8(44)**: 390-391.
(Type IV evidence – statistics)

ii. Communicable Disease Surveillance Centre (Wales). *KC60 data.*
(Type IV evidence – statistics)

iii. Health Education Authority. *Chlamydia: why you should know about it.* London: Health Education Authority, 1999
(Type V evidence – citing a survey carried out in 1997)

iv. Kellock DJ, Piercy H, Rogstad KE. Knowledge of *Chlamydia trachomatis* infection in genitourinary medicine clinic attenders. *Sexually Transmitted Infections* 1999; **75**: 36-40
(Type IV evidence – Questionnaire study of 500 consecutive patients (96.4% response rate = 482 completed questionnaires) attending a genitourinary medicine clinic for the first time)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
5.1c. New cases of **genital warts** have increased substantially since 1971, making this condition the commonest STI in England and Wales in 1997. The highest rates in Wales are among 20 to 24 year olds (693 per 100,000 men and 703 per 100,000 women in 1997). Rates are also high in women aged 16-19 years (645 per 100,000 in 1997), and among 25-34 year old men (279 per 100,000 in 1997)[i,ii].	**i.** Communicable Disease Surveillance Centre. Sexually transmitted diseases quarterly report: genital warts and genital herpes simplex virus infection in England and Wales. *Communicable Disease Report* 1998; **8(31)**: 274-276 (Type IV evidence – statistics) **ii.** Communicable Disease Surveillance Centre (Wales). *KC60 data*. (Type IV evidence – statistics)
5.1d. The numbers of reported cases of **genital herpes** in Wales have increased substantially between 1990 and 1997. Rates are highest among women aged 20–24 (105 per 100,000 in 1997), followed by women aged 16-19 (95 per 100,000 in 1997). Rates among men are highest for 20-24 year olds (45 per 100,000 in 1997) and 25-34 year olds (37 per 100,000)[i,ii].	**i.** Communicable Disease Surveillance Centre. Sexually transmitted diseases quarterly report: genital warts and genital herpes simplex virus infection in England and Wales. *Communicable Disease Report* 1998; **8(31)**: 274-276 (Type IV evidence – statistics) **ii.** Communicable Disease Surveillance Centre (Wales). *KC60 data*. (Type IV evidence – statistics)
5.1e. The incidence of **gonorrhoea** in England and Wales has decreased for both men and women since 1981. However, between 1995 and 1997 the number of cases appeared to be rising, in particular among men. In Wales the rates are highest among men in the 20-25 year old age group (up from 36 per 100,000 in 1995 to 66 per 100,000 in 1997). Cases among women in Wales have remained fairly constant, with the exception of a slight increase among 16-19 year olds: 32 per 100,000 in 1995 to 37 per 100,000 in 1997[i,ii].	**i.** Communicable Disease Surveillance Centre (1998c). Sexually transmitted diseases quarterly report: gonorrhoea in England and Wales. *Communicable Disease Report* 1998; **8(22)**: 194-196. (Type IV evidence – statistics) **ii.** Communicable Disease Surveillance Centre (Wales). *KC60 data*. (Type IV evidence – statistics)
5.1f. The cumulative number of **AIDS** cases in the UK to the end of 1998 was 16,028 of which 227 were in Wales. The equivalent figures for **HIV infection** were 33,764 for the UK of which 519 were in Wales. Although the proportion of cases acquired through heterosexual intercourse is increasing in Wales, the main transmission route for HIV infection continues to be sex between men[i].	**i.** Communicable Disease Surveillance Centre (Wales). *KC60 data*. (Type IV evidence – statistics)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
5.2 Adverse health effects	
5.2a. Important **sequelae** of inadequately treated STIs include pelvic inflammatory disease and infertility[i,ii], cervical cancer[iii], and increased susceptibility to HIV infection[iv].	**i.** Adler MW. Sexually transmitted diseases and their effect upon fertility and pregnancy outcome. *British Journal of Family Planning* 1991; **16** (Suppl): 46-50 (Type V evidence – expert opinion) **ii.** Healy DL, Trounson AO, Andersen AN. Female infertility: causes and treatment. *The Lancet* 1994; **343**: 1539-1544 (Type V evidence – expert opinion) **iii.** Bosch FX, Manos MM, Munoz N et al. Prevalence of human papillomavirus in cervical cancer: a worldwide perspective. *Journal of the National Cancer Institute* 1995; **87(11)**: 796-802 (Type IV evidence – histological analysis of 1000 specimens from patients with invasive cervical cancer) **iv.** Laga M, Manoka A, Kivuvu M et al. Non-ulcerative sexually transmitted diseases as risk factors for HIV-1 transmission in women: results from a cohort study. *AIDS* 1993; **7**: 95-102 (Type IV evidence – prospective case-control study in a cohort of 431 initially HIV-negative female prostitutes in Zaire)
5.2b. Chlamydia in particular represents a largely preventable source of reproductive morbidity[i]. After-effects of Chlamydia infection can be severe, particularly in women, in whom it may lead to pelvic inflammatory disease, ectopic pregnancy (which may be fatal), tubal-factor infertility and chronic abdominal pain[ii].	**i.** Department of Health. *Summary and Conclusions of CMO's Expert Advisory Group on Chlamydia trachomatis.* London: Department of Health, 1998 (Type V evidence – expert opinion) **ii.** Anonymous. Sexually transmitted diseases quarterly report: genital chlamydial infection, ectopic pregnancy, and syphilis in England and Wales. *Communicable Disease Report* 2000; **10(13)**: 116-118 (Type IV evidence – statistics)
5.2c. HIV infection is usually latent for several years and many infections are undiagnosed until the onset of illness. As yet there is no effective vaccine or cure for HIV. Development of combined antiretroviral treatments have been successful in reducing proliferation of HIV and destruction of the immune system in people already infected. However, these treatments are expensive and may be complicated by side effects and poor compliance[i].	**i.** Mortimer JY, Evans BG, Goldberg DJ. The surveillance of HIV infection and AIDS in the United Kingdom. *Communicable Disease Report* 1997; **7 (9)**: R118-120. (Type V evidence – expert opinion)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements* | The *evidence*

5.3 Educational interventions: young people

5.3a. It is possible to modify sexual behaviour through **education**, provided that attention is paid to programme design and implementation[i,ii,iii].
(Health gain notation - 2 *"likely to be beneficial"*)

i. Grunseit A, Kippax S, Aggleton P, Baldo M, Slutkin G. Sexuality education and young people's sexual behaviour: a review of studies. *Journal of Adolescent Research* 1997; **12(4)**: 421-453
(Type I evidence - systematic review of 47 intervention studies including 11 randomised controlled trials)

ii. Grunseit AC, Aggleton P. Lessons learned: an update on the published literature concerning the impact of HIV and sexuality education for young people. *Health Education* March 1998; **2**: 45-54
(Type I evidence - systematic review of 53 intervention studies including 15 randomised controlled trials)

iii. Kirby D, Short L, Collins J et al. School-based programs to reduce sexual risk behaviours: a review of effectiveness. *Public Health Reports* 1994: **109(3)**: 339-360
(Type I evidence – systematic review of 23 studies including 16 intervention studies)

5.3b. The impact of **educational strategies** is in the direction of **postponed initiation of sexual intercourse** and/or safer practices. There is little support for the contention that sex education encourages experimentation or increased sexual activity[i,ii].
(Health gain notation - 2 *"likely to be beneficial"*)

i. Grunseit A, Kippax S, Aggleton P, Baldo M, Slutkin G. Sexuality education and young people's sexual behaviour: a review of studies. *Journal of Adolescent Research* 1997; **12(4)**: 421-453
(Type I evidence - systematic review of 47 intervention studies including 11 randomised controlled trials)

ii. Kirby D, Short L, Collins J et al. School-based programs to reduce sexual risk behaviours: a review of effectiveness. *Public Health Reports* 1994: **109(3)**: 339-360
(Type I evidence – systematic review of 23 studies including 16 intervention studies)

5.3c. **School sex education** that includes specific targeted methods with the direct use of medical staff and peers can produce behavioural changes that lead to health benefit[i].
(Health gain notation -2 *"likely to be beneficial"*)

i. Mellanby AR, Phelps FA, Crichton NJ, Tripp JH. School sex education: an experimental programme with educational and medical benefit. *British Medical Journal* 1995; **311**: 414-417
http://www.bmj.com/cgi/content/full/311/7002/414
[accessed 10.3.00]
(Type III evidence – matched control experiment of a sex education intervention vs standard education over 3 years – questionnaire evaluation. 1175 students in programme vs 1373 local and 4025 distant controls)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

5.3d. To **promote sexual health** among young people in respect of sexually transmitted infections, it is necessary not only to advocate specific **preventive behaviour** such as condom use, but also to address **wider cultural issues** notably the taboos around the discussion of sex and the empowerment of women. Traditional gendered norms of sexual behaviour undermine young women's ability to choose safer sexual practices or to refuse unsafe sexual activity[i,ii].
(Health gain notation - 2 *"likely to be beneficial"*)

The design of evaluations in sexual health intervention needs to be improved so that more reliable evidence of the effectiveness of different approaches to promoting young people's sexual health may be generated[iii,iv].

The *evidence*

i. Wight D. Impediments to safer heterosexual sex: a review of research with young people. *AIDS Care* 1992; **4(1)**: 11-21
(Type IV evidence – review of 17 observational studies carried out in Britain)

ii. Holland J, Ramazanoglu C, Sharp S, Thomson R. *The Male in the Head: Young People, Heterosexuality and Power.* London: Tufnell Press, 1998.
(Type IV evidence – in-depth interviews carried out with purposive samples of 148 young women and 46 young men)

iii. Grunseit A, Kippax S, Aggleton P, Baldo M, Slutkin G. Sexuality education and young people's sexual behaviour: a review of studies. *Journal of Adolescent Research* 1997; **12(4)**: 421-453
(Type I evidence - systematic review of 47 intervention studies including 11 randomised controlled trials)

iv. Oakley A, Fullerton D, Holland J et al. Sexual health education interventions for young people: a methodological review. *British Medical Journal* 1995; **310**: 158-162
http://www.bmj.com/cgi/content/full/310/6973/158
[accessed 10.3.00]
(Type I evidence - systematic review studying the methodological quality of 270 research papers)

5.4 Effectiveness of condoms in preventing sexually transmitted infection

5.4a. **Condoms** provide substantial protection against HIV and other sexually transmitted infections[i,ii]. When used consistently, they are 90 to 95 per cent effective against HIV[ii].
(Health gain notation - 1 *"beneficial"*)

i. Shaw EJ, Rienzo BA. Permeability of latex condoms: do latex condoms prevent HIV transmission? *Journal of Health Education* 1995; **26(6)**: 372-376
(Type IV evidence – review of observational and laboratory studies)

ii. Pinkerton SD, Abramson PR. Effectiveness of condoms in preventing HIV transmission. *Social Science & Medicine* 1997; **44(9)**: 1303-1312
(Type IV evidence - systematic review, Medline only, of observational studies including 11 studies of consistent vs inconsistent condom use)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

5.5 Risk reduction interventions

5.5a. Individuals at elevated risk for sexually transmitted infections can be helped to achieve short-term change in their risk behaviours through **multiple-session interventions** which[i,ii,iii,iv]:

- involve face-to-face small group work with peer support;
- are based on theories of behaviour change;
- are sensitive to local culture and context;
- address cognitive and attitudinal factors;
- build motivation;
- address gender issues;
- focus on development of risk reduction skills such as sexual assertiveness and discussing and negotiating condom use.

(Health gain notation - 2 *"likely to be beneficial"*)

i. Wingood GM, DiClemente RJ. HIV sexual risk reduction interventions for women: a review. *American Journal of Preventive Medicine.* 1996; **12(3)**: 209-217
(Type I evidence - systematic review of 7 studies, 1152 women in total)

ii. Kim N, Stanton B, Li X, Dickersin K, Galbraith J. Effectiveness of the 40 adolescent AIDS-risk reduction interventions: a quantitative review. *Journal of Adolescent Health.* 1997; **20(3)**: 204-215
(Type I evidence - systematic review of 40 studies, including 14 randomised controlled trials)

iii. Kelly JA, Murphy DA, Washington CD et al. The effects of HIV/AIDS intervention groups for high-risk women in urban clinics. *American Journal of Public Health.* 1994; **84(12)**: 1918-1922
(Type II evidence - randomised controlled trial of 197 women at high risk for HIV infection)

iv. Kelly JA. Sexually transmitted disease prevention approaches that work. *Sexually Transmitted Diseases*. 1994; **21(2)** (Supplement): S73-S75
(Type II evidence – description of two studies: one randomised controlled trial of 197 women (see iii. above) and one randomised community study with homosexual men in 8 cities)

5.6 Partner notification

5.6a. **Partner notification** leads to identification and treatment of cases of STI[i,ii,iii].
(Health gain notation – 2 *"likely to be beneficial"*)

Research is required to establish the direct effects that this has on the incidence/prevalence of STIs within the community, and comparative efficacy and cost effectiveness of different strategies

i. Oxman AD, Scott EAF, Sellors JW et al. Partner notification for sexually transmitted diseases: an overview of the evidence. *Canadian Journal of Public Health* 1994; **Suppl 1**: S41-S47.
(Type I evidence – systematic review of 15 trials: 12 published, 2 unpublished and 1 trial in progress, of which 8 were randomised controlled trials)

ii. Cowan FM, French R, Johnson AM. The role and effectiveness of partner notification in STD control: a review. *Genitourinary Medicine* 1996; **72(4)**: 247-252
(Type IV evidence – influential reports and studies)

iii. Clarke J. Contact tracing for chlamydia: data on effectiveness. *International Journal of STD & AIDS* 1998; **9(4)**: 187-191
(Type IV evidence – influential reports and studies)

6 BEING A CARER

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The term Carer is taken to mean informal caregivers, rather than those providing care in the formal sector on an organised and paid basis. Health gain benefit is assessed here as being for the carer's health, not that of the patient.

It is clear from the literature (and not surprising) that carers and the people they care for are individuals with a vast range of preferences and needs. The main message from many research publications is the need for flexibility and good co-operation, i.e. the service system (health, social services and voluntary) should be well informed about and sensitive to carers' needs. Health service providers should co-operate with other agencies and should listen and respond to the expressed preferences of the people that they are trying to help. In general the 'hard evidence' base in this area is poor. As well as quantitative evidence, qualitative evidence is drawn on where it gives relevant insight, although care should be taken in generalising from qualitative studies.

The *statements*

6.1. Background

6.1a. There are about **5.7 million carers** in **Britain** (3.3 million women and 2.4 million men). One in eight adults provides informal care and one in six households (17%) contains a carer. Of these 5.7 million, 1.7 million (ie 30%) devote at least 20 hours per week to caring. Of the 1.9 million caring for someone in the same household, 38% spent at least 50 hours on the activity[i].

This contrasts with the results of the Welsh Health Survey which found that one in thirteen (7.5%) of adults in **Wales** is a **carer** of whom 12.5% usually care for more than 20 hours per week[ii].

The *evidence*

i. Rowlands O. Office for National Statistics, Social Survey Division. *Informal carers. An Independent Study Carried out by the Office of National Statistics on Behalf of the Department of Health as Part of the 1995 General Household Survey.* London: The Stationery Office, 1998
(Type IV evidence – observational information. Nationally representative sample of ca 18,000 adults living in private households in Great Britain)

ii. *Welsh Health Survey 1998.* Cardiff: The National Assembly for Wales, 1999
(Type IV evidence – survey of 50,023 adults, 1 in every 45 adults in Wales, with a response rate of 63%)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
6.1b. It is estimated that, in **Britain**, there are between 15,000 and 40,000 **young carers** (those under the age of 18), many receiving no support at all from statutory or voluntary services. Frequent effects include the following[i]. ■ Impaired educational development. ■ Isolation from other children of the same age. ■ Lack of time for play, sport or leisure. ■ Conflict between caring role and their own needs. ■ Lack of recognition, praise, understanding and assistance. ■ Feeling stigmatised. ■ Problems moving into adulthood. ■ Lost opportunities and limited horizons.	**i.** Department of Health Social Services Inspectorate. *Young Carers: Something to Think About. Report of four SSI workshops May – July 1995.* London: Department of Health, 1995 (Type V evidence – expert opinion)
6.1c. An important factor in the success of social services arrangements for carers was **joint working with other agencies** - particularly the health service. Lack of planning of hospital discharge, tensions between health and social services staff and lack of management support of community health staff were all cited as inhibiting effective co-working[i].	**i.** Department of Health Social Services Inspectorate. *What Next for Carers? Findings from an SSI Project.* London, Department of Health, 1995 (Type V evidence – expert opinion)
6.1d. As measured by the SF-36, the **physical health of carers** under the age of 65 is a little poorer than others in their age-group (46.9 vs 50.6) and the **mental component scores** are lower amongst carers than non-carers in all age groups[i].	**i.** *Welsh Health Survey 1998.* Cardiff: The National Assembly for Wales, 1999 (Type IV evidence – survey of 50,023 adults, 1 in every 45 adults in Wales, with a response rate of 63%)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
6.1e. **The prevalence of psychiatric morbidity** is significantly higher in people who care for others in their own homes. The odds ratio for psychiatric morbidity (using the General Health Questionnaire, GHQ) was 1.52 [95% CI, 1.11-2.05] after adjusting for other known risk factors[i].	**i.** Horsley S, Barrow S, Gent N, Astbury J. Informal care and psychiatric morbidity. *Journal of Public Health Medicine* 1998;**20(2)**: 180-185 (Type IV evidence - cross sectional survey of 4550 adults, 10.9% (496) of whom identified themselves as caregivers)
6.1f. One postal study revealed that 51% of carers had suffered a **physical injury** such as a strained back since they began to care. 52% had been treated for **stress-related illness** since becoming carers[i].	**i.** Henwood M. *Ignored and Invisible? Carers' Experience of the NHS.* London: Carers' National Association, 1998 (Type IV evidence – postal questionnaire of 5000 members of the Carers' National Association, 3000 (60%) responders)
6.1g. The small number of studies on informal care in **black communities** show that carers appear to be unsupported and isolated. This is often exacerbated by communication difficulties and the lack of sensitive and appropriate services. Service provision continues to remain ethnocentric, geared to meeting the needs of the white majority. Furthermore, there is evidence to show that black carers are often more severely affected by the problems of poverty and bad housing. The higher proportion of multi-generational households in black communities should not be interpreted as showing that 'black people look after their own'[i].	**i.** Butt J, Mirza K; Race Equality Unit. Chapter 7: Carers pp.101-114 in *Social Care and Black Communities.* London: Her Majesty's Stationery Office, 1996 (Type V evidence - Race Equality Unit review of small observational studies, maximum sample size = 50)
6.1h. There are positive as well as negative aspects to being a carer[i]. However, a critical review of 29 studies of the **gain** experienced by informal carers of **older adults** revealed a lack of an adequate framework for such studies[ii].	**i.** Grant G, Nolan M. Informal carers: Sources and concomitants of satisfaction. *Health and Social Care* 1993; **1**: 147-159 (Type IV evidence – review of observational studies) **ii.** Kramer BJ. Gain in the caregiving experience: Where are we? What next? *The Gerontologist* 1997; **37(2)**: 218-233 (Type IV evidence – systematic review of 29 observational studies looking at carers of older adults with various conditions e.g. stroke, dementia, unspecified)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
6.2 Health information	
6.2a. Access to a **special computer network** (ComputerLink - providing information, communication and decision-support functions) by carers of persons with **Alzheimer's disease** during a 1 year period increased caregivers' decision making confidence (Decision Confidence Measure 51.9 ± 6 to 56.8 ± 7). However, decision-making skill was unaffected and the system was used mostly for mail and discussion, rather than information purposes[i]. (Health gain notation – 4 "unknown") **Caveat:** The quality of the information provided in ComputerLink was not described.	**i.** Brennan PF, Moore SM, Smyth KA. The effects of a special computer network on caregivers of persons with Alzheimer's disease. *Nursing Research* 1995; **44(3)**: 166-172 (Type II evidence – randomised controlled trial of 102 caregivers)
6.2b. In a small study of an **education/support programme** (over two weekends) for carers of **head injured survivors**, the participants welcomed the programme but it had no measurable effect on coping skills, self-esteem or general well-being[i]. (Health gain notation – 4 *"unknown"*)	**i.** Acorn S. Assisting families of head-injured survivors through a family support programme. *Journal of Advanced Nursing* 1995; **21**: 872-877 (Type III evidence – before and after study of 19 family members)
6.2c In one survey, 94% of carers were providing **crucial medical care** but only 33% had received **training or guidance** of any kind[i]. (Health gain notation – 6 *"likely to be ineffective or harmful"*)	**i.** Warner L, Wexler S. *Eight Hours a Day and Taken for Granted?* London: Princess Royal Trust for Carers, 1998 (Type IV evidence – questionnaire survey of 1346 carers from 23 Princess Royal Trust Carers Centres, 30% response rate; Analysis based on respondents who cared for 8+ hours per day (82%=331 carers)).
6.3. General support	
6.3a. Home care crisis treatment with an ongoing home care package for people with **severe mental illnesses** has been shown to reduce family burden with a reduction in physical illness at 6-month follow-up (odds ratio, OR 0.31, 95% CI 0.13-0.73; Number needed to treat, NNT 4, 95% CI 2-14)[i]. (Health gain notation – 2 *"likely to be beneficial"*)	**i.** Joy CB, Adams CE, Rice K. Crisis intervention for people with severe mental illnesses. Cochrane Database of Systematic Reviews. *Cochrane Library* 1999, Issue 2. http://www.update-software.com/ccweb/cochrane/revabstr/ab001087.htm [accessed 10.3.00] (Type I evidence – systematic review of 5 randomised controlled trials)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
6.3b A systematic review of **specialised continuing care models** for persons with dementia showed that respite care, day programmes and/or counselling may increase the time to institutionalisation, but do not necessarily improve the quality of life for carers[i]. (Health gain notation – 5 *"unlikely to be beneficial"*) Some studies reviewed did, however, show effectiveness to the carer of **counselling** and of admission of the severely demented person to a special unit[i]. (Health gain notation – 4 *"unknown"*) See also Section 6.5	**i.** Roberts J, Browne G, Gafni A *et al. Specialized Continuing Care Models for Persons with Dementia: A Systematic Review of the Research Literature.* Working Paper Series #97-5. Hamilton, McMaster University: System Linked Research Unit on Health and Social Service Utilization, 1997 (Type I evidence – systematic review)
6.3c. There is no significant evidence to support either the widespread adoption or the discontinuation of existing **hospital at home schemes** for patients. However, their carers expressed less satisfaction with hospital at home compared to in-patient care[i]. (Health gain notation – 4 *"unknown"*)	**i.** Sheppeard S, Iliffe S. Effectiveness of hospital at home compared to in-patient hospital care. Cochrane Database of Systematic Reviews. *Cochrane Library* 1999 Issue 3 http://www.update-software.com/ccweb/cochrane/revabstr/ab000356.htm [accessed 10.3.00] (Type I evidence – systematic review of 5 small trials involving 866 patients, with little uniformity in the choice of outcome measures)
6.3d. It is unclear from the current available evidence whether **outreach respiratory nursing assistance** or other 'shared care' or 'co-ordinated care' approaches benefit patients with **chronic obstructive pulmonary disease** and/or their carers, or are cost-effective to the NHS. A Cochrane Review is underway. Outcomes measured for carers will be quality of life and satisfaction[i]. (Health gain notation – 4 *"unknown"*)	**i.** Smith B, Appleton S, Adams R, Southcott A, Ruffin R. Home care by outreach nursing for chronic obstructive pulmonary disease (Protocol). Cochrane Database of Systematic Reviews. *Cochrane Library* 1999, Issue 2 (Type I evidence – systematic review in progress) Now published: http://www.update-software.com/ccweb/cochrane/revabstr/ab000994.htm [accessed 10.3.00]

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
6.3e. Two **active behavioural treatments** to patient/care-giver pairs for depression in **dementia** patients improved depressive symptoms in both patients and care-givers. The combined results for the two active treatment conditions as measured by the Hamilton Depression Rating Scale were significant [pre-test (8.06 ± 4.2), post-test (5.88 ± 2.8), 6-months follow up (6.19 ± 2.9)] compared to non-significant changes in the other conditions[i]. (Health gain notation – 2 *"likely to be beneficial"*)	**i.** Teri L, Lodgson RG, Uomoto J, McCurry SM. Behavioural treatment of depression in dementia patients: a controlled clinical trial. *Journal of Gerontology* 1997; **52B(4)**: P159-P166 (Type II evidence – controlled trial of two active treatments compared with typical care and a wait-list control of 88 patient-caregiver pairs, 72 completing the post-test)
6.3f. A **home-based physical activity regime** (with regular follow-up over four months) in sedentary older caregivers of **memory disordered patients,** reporting at least moderate amounts of stress, can lead to better anger control and, possibly, reduced systolic blood pressure[i]. (Health gain notation – 2 *"likely to be beneficial"*)	**i.** King AC, Brassington G. Enhancing physical and psychological functioning in older family caregivers: the role of regular physical activity. *Annals of Behavioural Medicine* 1997; **19(2)**: 91-100 (Type II evidence – randomised controlled trial of 24 caregivers)
6.3g. One study in a systematic review of randomised controlled trials, quoting data from individual trials, concluded that **family intervention** for people with **schizophrenia** and their families may reduce the burden felt by family carers (Mean difference –0.4, 95% CI, -0.7 to –0.9) and expressed emotion, but not the families' ability to cope[i]. (Health gain notation – 2 *"likely to be beneficial"*)	**i.** Pharoah FM, Mari JJ, Streiner D. Family intervention for schizophrenia. Cochrane Database of Systematic Reviews. *Cochrane Library* 1999, Issue 2 http://www.update-software.com/ccweb/cochrane/revabstr/ab000088.htm [accessed 10.3.00] (Type II evidence – randomised controlled trial of 60 patients and their caregivers)
6.3h. A six session **psychosocial intervention programme** (which included support, problem solving and coping skills) for spouses of newly diagnosed cancer patients was effective only for a distressed sub-sample of caregivers (11 in treatment, 13 in control group)[i]. (Health gain notation – 3 *"trade-off between beneficial and adverse effects"*) **Caveat:** In general, caregivers' level of caring activities was low which may account for these findings.	**i.** Toseland RW, Blanchard CG, McCallion P. A problem solving intervention for caregivers of cancer patients. *Social Science and Medicine* 1995; **40(4)**: 517-528 (Type II evidence – randomised controlled trial of 80 spouses)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
6.3i. **Emotionally focused therapy** resulted in a significant decrease of marital distress in couples with **chronically ill children,** post-treatment and at 5 months follow-up[i]. (Health gain notation – 2 *"likely to be beneficial"*)	**i.** Walker JG, Johnson S, Manion I, Cloutier P. Emotionally focused marital intervention for couples with chronically ill children. *Journal of Consulting and Clinical Psychology* 1996; **64(5)**: 1029-1036 (Type II evidence – randomised controlled, but unblinded, study of 32 couples)
6.3j. A **comprehensive support programme** (with individual and family counselling, continuous availability of ad hoc counselling and support group participation) in spouse caregivers of patients with **Alzheimer's disease**, can substantially reduce the increase in symptoms of depression[i]. It can also substantially increase the length of time that they are able to care for the patients at home. The average time to nursing home placement was 329 days longer (95% CI 47-611 days) in the treatment than the control group (p=.02)[ii]. (Health gain notation – 2 *"likely to be beneficial"*) See also Statement 6.4a	**i.** Mittelman MS, Ferris SH, Shulman E et al. A comprehensive support program: Effect on depression in spouse-caregivers of AD patients. *The Gerontologist* 1995; **35(6)**: 792-802 (Type II evidence – randomised controlled trial of 206 spouse-caregivers) **ii.** Mittelman MS, Ferris SH, Shulman E, Steinberg G, Levin B. A family intervention to delay nursing home placement of patients with Alzheimer disease. *Journal of the American Medical Association* 1996; **276(21)**: 1725-1731 (Type II evidence – randomised controlled trial of 206 spouse caregivers)
6.3k. Given the limited nature of the evidence from randomised trials, it is not yet possible to recommend the following **services versus conventional support** for carers of people with **Alzheimer's disease**[i]. ■ Individualised service assessment and planning ■ Technology-based carer networking ■ Carer-education/training ■ Multi-faceted/dimensional strategies (such as specialised carer assessment and training). (Health gain notation – 4 *"unknown"*) **Caveat:** This review was limited to those caring for people with Alzheimer's disease. Some of the studies put forward qualitative evidence that contradicts this conclusion. *Further research is recommended.*	**i.** Thompson C, Briggs M. Support for carers of people with Alzheimer's type dementia. Cochrane Database of Systematic Reviews. *Cochrane Library* 1999 Issue 2. http://www.update-software.com/ccweb/cochrane/revabstr/ab000454.htm [accessed 10.3.00] (Type I evidence – systematic review, using the Cochrane Controlled Trials Register only, of 6 randomised controlled trials with methodological problems & looking at various services - 565 carers in total. The papers described above were not included in this review as included or excluded studies)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
6.3l. Six months after the start of an **enhanced occupational therapy service** (an average of 6 visits rather than 2-3) for **stroke patients**, the carers of patients receiving the enhanced service (but not the patients themselves) were less distressed than the carers of patients receiving the routine service. General Health Questionnaire, GHQ = 29 (0-13) for treatment and 26 (0-27) for control group[i]. (Health gain notation – 2 *"likely to be beneficial"*) **Caveat:** Not all patients had carers. Comparability of carers in control and intervention groups was not demonstrated.	**i.** Logan PA, Ahern J, Gladman JRF, Lincoln NB. A randomized controlled trial of enhanced Social Service occupational therapy for stroke patients. *Clinical Rehabilitation* 1997; **11**: 107-113 (Type II evidence randomised controlled trial of 111 stoke patients and their carers)
6.3m. The introduction of a **stroke family care worker** improved patients' and their carers' satisfaction with services and had a marginal beneficial effect on some psychological and social outcomes (using a variety of measures) but did not improve measures of patients' physical well-being[i]. (Health gain notation – 2 *"likely to be beneficial"*) **Caveat:** Only a limited subset of patients' carers were studied and the comparability of the two groups of carers is not demonstrated.	**i.** Dennis M, O'Rourke S, Slattery J, Staniforth T, Warlow C. Evaluation of a stroke family care worker: results of a randomised controlled trial. *British Medical Journal* 1997; **314**: 1071-1077 http://www.bmj.com/cgi/content/full/314/7087/1071 [accessed 10.3.00] (Type II evidence – randomised controlled trial of 417 patients with an acute stroke. Carers analysis is on less than half this number)
6.3n. **Individualised problem-solving counselling** by trained nurses for carers of people with cognitive impairment during a 6-month period showed no improvement in psychosocial adjustment, psychological distress or caregiver burden at 12 months in the treatment compared to the control (usual care) group. However, all recipients stated that they found counselling helpful and it was of measurable benefit for a subgroup of carers with poor logistical analysis skills at baseline[i]. (Health gain notation – 4 *"unknown"*) **Caveat:** This subgroup was identified retrospectively by an interaction effect. 119 carers were eligible for the study, 36 refused, 83 were randomised, 77 completed baseline data but only 58 completed the 12 months follow-up.	**i.** Roberts J, Browne G, Milne C *et al*. Problem-solving counselling for caregivers of the cognitively impaired: Effective for whom? *Nursing Research* 1999; **48(3)**: 162-172 (Type II evidence – randomised controlled trial of 77 carers)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
6.3o. Financial help from the **'Family Fund'** for mothers of **severely disabled children** produced a limited although statistically significant reduction in the mothers' perceptions of the stresses of caring for their child (as measured 10 days to 3 weeks after receipt of the grant). The mothers' sense of well-being and adjustment also improved[i]. (Health gain notation – 2 *"likely to be beneficial"*)	**i.** Beresford BA. Easing the strain: assessing the impact of a Family Fund grant on mothers caring for a severely disabled child. *Child: care, health, development.* 1993; **19**: 369-378 (Type III evidence – before and after study of 162 mothers)
6.3p. When support (six or more visits during a 12 month period) was provided by a **specialist outreach nurse** to patients with disability related to **recent stroke** there were no significant differences in stress (as measured by the general health questionnaire) experienced by carers in the treatment or control groups at any of the assessment points (3, 6 and 12 months). The study concluded that no proven strategy exists that can be recommended to address the psychosocial difficulties of patients with stroke and their families[i]. However, when a purposeful stratified subsample of carers in both groups were interviewed, the majority in the intervention group believed they had benefited from the specialist nurse's visits[ii]. (Health gain notation – 4 *"unknown"*) **Caveat:** The measurement tool (the Barthel Index) used in the randomised controlled trial (and in many other studies) may not be sufficiently sensitive to detect the amelioration of the worries, problems and frustration experienced by carers.	**i.** Forster A, Young J. Specialist nurse support for patients with stroke in the community: a randomised controlled trial. *British Medial Journal* 1996; **312**: 1642-1646 http://www.bmj.com/cgi/content/full/312/7047/1642 [accessed 10.3.00] (Type II evidence – randomised controlled trial of 140 patients and their carers) **ii.** Dowswell G, Lawler J, Young J, Forster A, Hearn J. A qualitative study of specialist nurse support for stroke patients and care-givers at home. *Clinical Rehabilitation* 1997; **11**: 293-301 (Type IV evidence – qualitative analysis, by semi-structured questionnaire, of 8 treatment and 7 control group caregivers)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
6.4 Support groups and carers' centres	
6.4a. **Support group** programmes for caregivers of people with dementia only seemed to improve knowledge of the condition. Eight months following the intervention (eight 3-hour sessions), there was no effect on the burden felt by the care-giver[i] and insufficient evidence of efficacy in terms of delayed institutionalisation[ii]. (Health gain notation – 4 *"unknown"*) See also Statement 6.3j	**i.** Hébert R, Leclerc G, Bravo G, Girouard D, Lefrançois R. Efficacy of a support group programme for care-givers of demented patients in the community: a randomized controlled trial. *Archives of Gerontology and Geriatrics* 1994; **18**: 1-4 (Type II evidence – randomised controlled trial of 41 care-givers) **ii.** Hébert R, Girouard D, Leclerc G, Bravo G, Lefrançois R. The impact of a support group programme for care-givers on the institutionalisation of demented patients. *Archives of Gerontology and Geriatrics* 1995; **20**: 129-134 (Type II evidence – randomised controlled trial of 45 caregivers)
6.4b. A critical review of 21 studies that evaluated **support groups** for caregivers stated that there is insufficient evidence to allow definite conclusions about their usefulness to be drawn. It did, however, show that there were a number of positive effects and very few negative effects[i]. (Health gain notation – 4 "unknown") **Caveat:** This review was not systematic and publication bias could well produce a picture like this.	**i.** Lavoie J-P. Support groups for informal caregivers don't work! Refocus the groups or the evaluations. *Canadian Journal on Aging* 1995; **14(3)**: 580-603 (Type IV evidence – review of a variety of studies, not all experimental)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
6.4c. In contrast to the evidence on support groups (statements 6.4a and 6.4b) Social Services Inspectors received nothing but praise from carers involved with **carers' groups** or **carers' centres**[i]. In a survey of users of carers' centres, carers stated that their most valuable support was a 'listening ear' and 59% had obtained this from a carers' centre[ii]. (Health gain notation – 2 *"likely to be beneficial"*)	**i.** Fruin D. Social Services Inspectorate. *A Matter of Chance for Carers? Inspection of Local Authority Support for Carers.* London: Department of Health Social Care Group, 1998. CI(98)19. Paragraph 1.19. http://www.doh.gov.uk/scg/chance.htm [accessed 10.3.00] (Type IV evidence – report of an inspection of 7 social services departments in England during 1997/8 using interviews & focus group techniques with users/staff and case file reviews) **ii.** Warner L, Wexler S. *Eight Hours a Day and Taken for Granted?* London: Princess Royal Trust for Carers, 1998 (Type IV evidence – questionnaire survey of 1346 carers from 23 Princess Royal Trust Carers Centres, 30% response rate; Analysis based on respondents who cared for 8+ hours per day (82%))

6.5 Day and respite care

6.5a. A systematic review of 18 studies concluded that **respite interventions and individual psychosocial interventions** are moderately effective[i]. (Health gain notation – 2 *"likely to be beneficial"*) **Caveat:** Only one of these studies was a randomised controlled trial.	**i.** Knight BG, Lutzky SM, Macofsky-Urban F. A meta-analytic review of interventions for caregiver distress: recommendations for future research. *The Gerontologist* 1993; **33(2)**: 240-248 (Type I evidence – systematic review of 18 studies)
6.5b. A more recent systematic review concluded that there is little evidence that **respite care** for a patient with **dementia** significantly affects caregiver burden or delays institutionalisation of the patient[i]. (Health gain notation – 4 *"unknown"*) However, a qualitative study of services providing a **break for carers** of people with **Alzheimer's disease** or related disorders (day care, relief care, sitting services) found that these were usually felt to be beneficial by the carer[ii]. (Health gain notation – 2 *"likely to be beneficial"*) See also Statement 6.3b.	**i.** Flint AJ. Effects of respite care on patients with dementia and their caregivers. *International Psychogeriatrics* 1995; **7(4)**: 505-517 (Type I evidence – systematic review of 4 controlled studies and carers of 762 patients. Reviewed in the Database of Abstracts of Reviews of Effectiveness, Cochrane Library 1999 Issue 2) **ii.** Levin E, Moriarty J, Gorbach P. National Institute for Social Work Research Unit. *Better for the Break.* London: The Stationery Office, 1994 (Type IV evidence – A comprehensive survey of 530 confused elderly people & their carers with an interview survey, plus one year follow-up of 243 carers)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*	The *evidence*
6.5c. A review of **respite services for people with learning disabilities** concluded that, although quantifiable results from research studies are limited, expressed satisfaction with respite and felt relief are sufficient criteria to justify the need. However, it is generally considered that respite can influence the quality of life of carers (and users of the services) in both negative and positive ways. To provide a benefit, services must be flexible and responsive to users so that they feel confidence in the care provided[i]. (Health gain notation – 2 *"likely to be beneficial"*)	**i.** Cotterill L, Hayes L, Flynn M, Sloper P. Reviewing respite services: some lessons from the literature. *Disability and Society* 1997; **12(5)**: 775-788 (Type V evidence – expert summary from a non-systematic review of the literature)
6.5d. **Respite services for disabled children** are of value and should, as far as possible, be tailored to the needs of the families[i]. (Health gain notation – 2 *"likely to be beneficial"*)	**i.** Ball M. Social Services Inspectorate. *Disabled Children: Directions for their Future Care.* London: Department of Health, 1998 (Type V evidence – results of a series of seminars held by the Social Services Inspectorate in England during 1997)
6.5e. A descriptive study of **family-to-family respite help** for eight families where **children** had significant disabilities suggest that this arrangement was generally well received. Compared to a similar period in the previous year, the families' need for other interventions (hospitalisation, physician visits, antibiotic treatment) was reduced[i]. (Health gain notation – 2 *"likely to be beneficial"*)	**i.** Mausner S. Families helping families: An innovative approach to the provision of respite care for families of children with complex medical needs. *Social Work in Health Care* 1995; **21(1)**: 95-106 (Type IV evidence – descriptive evaluation)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

The *evidence*

6.6 Carers' needs and entitlements

6.6a. The Carers **(Recognition and Services) Act 1995** gives people who provide or intend to provide "a substantial amount of care on a regular basis" the right to request an assessment from social services[i]. But the implementation of this Act is patchy[ii,iii]. Carers are not always informed of their rights (53% in one survey)[ii] and many Social Services staff are unclear about entitlement and lack relevant training[iii]. Assessments are not always carried out. Some carers are offered very sensitive and practical support, others almost nothing. However, when assessments are undertaken, carers report satisfaction both with the process and the results[ii,iii]. Carers should be entitled to expect at least an annual discussion of what they need, what is available, the help they are receiving and the care provided[iv].
(Health gain notation – 4 *"unknown"*)

i. *Carers (Recognition and Services Act)* 1995 (c.12)
(Type V evidence – influential report)

ii. Carers National Association. *Still Battling? The Carers Act One Year On.* London: CNA, 1997
(Type IV evidence – a questionnaire survey (1655 replies) from 12,000 members of the Carers National Association) and 50 follow-up interviews)

iii. Fruin D. Social Services Inspectorate. *A Matter of Chance for Carers? Inspection of Local Authority Support for Carers.* London: Department of Health Social Care Group, 1998. CI(98)19
http://www.doh.gov.uk/scg/chance.htm
[accessed 10.3.00]
(Type IV evidence – report of an inspection of 7 social services departments in England during 1997/8 using interviews & focus group techniques with users/staff and case file reviews)

iv. *Caring about Carers. A National Strategy for Carers.* London: Department of Health, 1999
http://www.doh.gov.uk/carers.htm [accessed 10.3.00]
(Type V evidence – influential report)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

6.6b. "The National Strategy for Carers":

The **Government's carers package** is promised to include the following[i].

- A new charter on what people can expect from long-term care services.
- Good health information for carers. (Carers need good information[ii,iii]). An NHS Direct helpline for carer information and government information on the Internet is planned.
- Involvement of carers in planning and providing services. (Carers expect that professionals should listen to and respect their views[iv]).
- New powers for local authorities to provide services and address carers' needs.
- Support for neighbourhood services, including carers' centres. (Carers need reliable and satisfactory services[ii,iv,v]).
- New special grant to help carers take a break (£140 million over the next 3 years). (There is a body of evidence suggesting that time off helps carers to cope and continue to care[ii]).
- Financial support for working carers to remain under review.
- Time spent caring will entitle carers to a second pension.
- By 2050 carers could receive an extra £50 a week in today's terms (proposals are under consultation).
- Reducing council tax for more disabled people being cared for.
- Considering scope for extending help to carers to return to work.
- New census question to tackle incomplete information about carers.
- Support for young carers, including help at school.

The *evidence*

i. *Caring about Carers. A National Strategy for Carers.* London: Department of Health, 1999.
http://www.doh.gov.uk/carers.htm [accessed 10.3.00]
(Type V evidence – influential report)

References to specific publications in this document are given below.

ii. Twigg J (ed.) *Carers: Research and Practice.* London: The Stationery Office, 1992
(Type V evidence – well referenced expert review biased towards authors' own work)

iii. Warner L, Wexler S. *Eight Hours a Day and Taken for Granted?* London: Princess Royal Trust for Carers, 1998
(Type IV evidence – questionnaire survey of 1346 carers from 23 Princess Royal Trust Carers Centres, 30% response rate; Analysis based on respondents who cared for 8+ hours per day (82%))

iv. Quereshi H, Patmore C, Nicholas E, Bamford C. *Overview: Outcomes for Older People and their Carers.* No.5 in Outcomes in Community Care Practice. University of York: Social Policy Research Unit, 1998
(Type IV evidence – group and individual interviews with 22 carers)

v. Department of Health Social Services Inspectorate (September 1995). *What Next for Carers?* Findings from an SSI Project. London, Department of Health 1995.
(Type V evidence – expert opinion)

This document is a supplement to, not a substitute for, professional skills and experience. Users are advised to consult the supporting evidence for a consideration of all the implications of a recommendation.

The *statements*

6.6c. An important, if not very recent, review of research into the needs of carers makes a series of points that are relevant to this topic[i]. A selection of these follow.

- **General practitioners** occupy a pivotal position in community care but they tend to focus on the patient rather than the carer and are variable in their knowledge of service support particularly concerning relevant referrals outside the health sector (p.73-74).
- Carers value **information** about the condition of the person they look after and GPs are particularly well placed to give this (p.74).
- **Acute hospital** care is not attuned to carers' needs. Consultant psychiatrists tend to be more aware of the existence of carers but their practice remains strongly focused on the patient (p.74).
- Visits from **social workers** are valued by carers but there is little evidence that they – or other practitioners – mobilise complex packages of support for carers. (p.67).
- The **home care service** is highly valued by clients and carers (p.68).
- **Community nurses** are valued by carers (p.79).
- Regular help from **care assistants** is valued by carers (p.102).
- **Day care** is valued by carers and may help to enhance their mental well-being. It is particularly valuable where the cared-for person has dementia or exhibits behavioural problems. However, availability varies greatly between localities and client groups (p.84).
- Voluntary help may be seen as charity by carers. **Payment of helpers** may make this more acceptable, and increase the range of help considered acceptable and the availability of helpers (p.100).
- Carers value **support groups** as an opportunity to share experiences with people in a similar situation and to exchange information and emotional support (p.91).
- **Institutional respite** is valued by those carers who use it, and there is evidence to suggest that it improves their levels of well-being. Attempts to maximise bed occupancy can lead to respite being provided in inflexible and standardised packages that do not meet the needs of individual carers (p.88-89).

(Health gain notation – 4 *"unknown"*)

The *evidence*

i. Twigg J. *Carers Research and Practice.* London: The Stationery Office, 1992
(Type V evidence – well referenced expert review biased towards author's own work)

INDEX

A

B

T

U

V

W

Y

Bwletinau Tystiolaeth ar Iechyd Cymru

Bulletins in this series

- Oral health
- Healthy living
- Cardiovascular diseases
- Injury prevention
- Cancers
- Learning disabilities
- Respiratory diseases
- Pain, discomfort & palliative care
- Mental health
- Physical disability & discomfort
- Maternal & early child health
- Healthy environments

Health Evidence Bulletins - Wales
Department of Information Services, University of Wales College of Medicine, Cardiff CF14 4XN
Tel: 029 2074 5142 Fax: 029 2074 3574 email: weightmanAL@cardiff.ac.uk

National Assembly for Wales, 2000
Design & Production: Mitchell Associates, Newtown; Ridler Webster Ltd., Swansea; SGC Printing, Merthyr Tydfil.