

Education

Chapter 9 of the White Paper identified a number of wider public health issues on which it calls for further action, including sexual health, tackling drugs, diet and nutrition, food safety, and work-based health promotion. This section of the report summarises the findings of systematic reviews of the effects of educational interventions, including both the form and content of health education and health promotion programmes.

Health Promotion – General effectiveness of health education / health promotion

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Harden A, Weston R, Oakely A. A review of the effectiveness and appropriateness of peer-delivered health promotion interventions for young people. EPI-Centre, London, Social Science Research Unit, Institute of Education 1999.	A systematic review of peer-delivered health promotion for young people found some evidence to support its effectiveness. There were more sound outcome evaluations which demonstrated peer-delivered health promotion to be effective than ineffective. More than half of the sound studies showed a positive effect on at least one behavioural outcome. The studies reviewed in this report are not encouraging on the issue of peer-delivered health promotion reaching young people at enhanced risk of adverse health behaviours. Also young men are notably more reluctant to take on the role of peer educator. The current evidence for peer-delivered health promotion is therefore limited.	A systematic review of peer-delivered interventions aimed at primary prevention of disease or health promotion among young people aged 11-24 years. The review was restricted to studies in the English language and excluded peer counselling or mediation interventions as well as those where the principle medium of the intervention was video, theatre or newsletters. The searches produced 5124 citations of which 523 met the inclusion criteria. 49 outcome and 15 process evaluations were included in the review the most common focus for the outcome evaluations was drugs (including alcohol and smoking – 53%) and for process evaluations sexual health (56%) 12 of the 49 outcome evaluation studies were assessed as methodologically sound. The authors note that “as in previous systematic reviews in health promotion methodologically sound studies were disappointingly scarce”.

EDUCATION: Health Promotion – General effectiveness of health education / health promotion

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Kok G, Van Den Borne B, Dolan P. Effectiveness of health education and health promotion: meta-analysis of effect studies and determinants of effectiveness. Patient Education and Counseling 1997;30(1):19-27.	Systematic review of MW Lipsey and DB Wilson 1993. Health education and promotion may be effective, but they are not always found effective. Characteristics of effective interventions are reviewed.	A systematic review based on the work of Lipsey and Wilson 1993 and of Mullen 1988 on primary studies in the areas of psychological, psycho-therapeutic, behavioural and educational interventions. The work of Lipsey and Wilson should be noted for its findings that meta-analyses tend to find moderate effect sizes with negative findings and strong effect sizes being fairly uncommon.
Krishna S, Balas A, Spencer DC, Griffin JZ et al. Clinical trials of interactive computerized patient education: implications for family practice. Journal of Family Practice 1997;45(1):25-33.	A systematic review of computerized patient education interventions found positive results for interactive educational intervention. The one exception to this was the treatment of alcoholism. Computerized educational interventions can lead to improved health status in several major areas of care, and are a supplement to, but not a substitute for, face-to-face time with physicians.	A systematic review of 22 randomized clinical trials of computerized patient education interventions identified 13 studies that used instructional programmes, 5 that used information support networks and 4 that evaluated systems for health assessment and history taking. The exception of alcoholism treatment to the findings of positive results of such interventions should be noted.
Harrison JA, Mullen PD, Green LW. A meta-analysis of studies of health belief model with adults. Health Education Research 1992;7(1):107-16.	A systematic review found a generally weak effect of the health belief model (HBM) on health promotion. It concluded that it is premature to draw conclusions about the predictive validity of the HBM as operationalized in these studies.	A systematic review of 16 studies identified 24 mean effect sizes. 22 were positive and statistically significant. The lack of homogeneity amongst the studies identified, and the limitations this puts upon the available evidence should be noted.
Baker SB, Swisher JD, Nadenicheck PE, Popowicz CL. Measured effects of primary prevention strategies. Personnel and Guidance Journal 1984;62(8):459-64.	A systematic review of primary prevention strategies in schools concluded that the results are encouraging and that there is evidence of their measured effectiveness. Some limits to the generalizability of these findings are noted. Also a lack of clarity in terms of the content and goals of some primary prevention programmes was noted.	A systematic review of 40 primary prevention studies that used intervention and control groups some problems of inconsistent data reporting within and across professional journals should be noted as should some problems in measuring the dependent variable in different primary studies.

EDUCATION: Sexual Education – Preventing teenage pregnancy

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Dienso A, Guyatt G, Willan A. A systematic review of the effectiveness of adolescent pregnancy primary prevention programmes. Hamilton, Ontario. Effective Public Health Practice Project. March 1999.	A systematic review of studies of primary prevention programmes in preventing adolescent pregnancy found that there are no simple approaches that will markedly reduce adolescent pregnancy. The evidence demonstrates that programmes that focus on sexuality, including school, community, and clinic based interventions, do not increase sexual activity. There does not exist any evidence the abstinence-only programmes delay the onset of intercourse or pregnancy. These programmes were substantial in duration and focused on behaviours. They were theory based, actively involved participants, shared facts, focused on social pressures, modeling and skill rehearsal, and they included trained adult or peer leaders.	This review was based on 11 electronic databases from 1970 to November 1998, The Cochrane Library, handsearching of key journals between January 1993 and 1998, and reference lists from retrieved articles. Each reviewed article was independently reviewed for relevance and validity by two reviewers. 20 randomized controlled trials were identified for inclusion in this review. The trials were assessed for quality using a four point scales and only two studies scored higher than two. Neither study found any significant difference in outcomes between groups. The three behavioural outcomes of interest were: initiation of intercourse, birth control use and pregnancy. In total the 20 studies examined these outcomes 40 times. Of these there were five significant findings. These need to be interpreted cautiously because, out of 40 outcomes, one would expect to find two significantly significant findings by chance ($P < 0.05$) and all these studies were rated as poor when assessed for quality.
Zoritch, B, Roberts I, Oakley A. The health and welfare effects of day care: a systematic review of randomised controlled trials. Social Science and Medicine 1998;47(3):317-727.	Day-care for pre-school children has a number of positive educational and health outcomes, one of which is lower teenage pregnancy rates. There are also positive effects on mothers education, employment and interaction with children. This systematic review by UK researchers is of US trials, some of which had methodological weaknesses. The need for well designed research of the effects of day-care in the British context is noted.	Good quality systematic review with cautious notes about some methodological weaknesses of some primary studies
NHS Centre for Reviews and Dissemination. Effective health care preventing and reducing the adverse effects of unintended teenage pregnancies 1997;3(1):1-12.	A factor strongly associated with deferring pregnancy is a good general education. School-based sex education can be effective in reducing teenage pregnancy especially when linked to access to contraceptive services. The most reliable evidence shows that it does not increase sexual activity or pregnancy rates. Increasing the availability of contraception clinic services for young people is associated with reduced pregnancy rates.	A systematic review of 45 reviews of research in the area of teenage pregnancy, of which 5 were considered to be relevant and of high quality. A total of 42 evaluations of educational approaches to preventing teenage pregnancy was identified. The sample sizes of most studies was small and statistical power was therefore weak. No pooling or aggregation of samples was attempted.

EDUCATION: Sexual Education – Preventing teenage pregnancy

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
De Ridder LM. Teenage pregnancy: etiology and educational interventions. Educational Psychology Review 1993; 5(1):87-107.	Educational interventions to reduce and/or prevent teenage pregnancy have been evaluated and found to be generally ineffective. However, two programmes (in Minnesota and Maryland USA) have demonstrated significant reductions in teenage pregnancy (details of which are vague).	A systematic review of a number of educational interventions in the U.S. to reduce teenage pregnancy
Stout J, Rivara F. Schools sex education: does it work. Pediatrics 1989;83:375-89.	A narrative literature review of the effects of school-based sex education on sexual behaviour, contraception and adolescent pregnancy found that there is little or no effect of these programmes.	A narrative literature review which identified 5 studies of the effect of sex education on the outcomes mentioned.

EDUCATION: Sexual Education – Providing better understanding about sex and relationships

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Denman , Gillies , Wilson , Wijewardene . Sex education in schools: an overview with recommendations. Public-Health 1994;108(4):251-6.	A number of key principles which are essential for effective sex education within schools. Planning and teaching of the topic, in-service training of teachers, and the established links between schools and parents. The wide variations in quality and quantity of provision of sex education in schools, does not appear to be consistently supportive. Practical recommendations are included.	An overview (not a systematic review) of a number of key policies on sex education in England and Wales including those related to the 1983 Education Act. The limitations of overviews (as opposed to systematic reviews) should be noted.
Schlaefli A, Rest JR, Thoma SJ. Does moral education improve moral judgement? A meta-analysis of intervention studies using the defining issues test. The Review of Educational Research 1985;55(3):319-52.	A systematic review of education interventions designed to stimulate development in moral judgement found that the dilemma discussion and psychological development programmes produce modest overall effect sizes. Interventions of 3-22 weeks are optimal. Programmes with adults (24+ years) produce larger effect sizes than with younger people. However significant effect sizes were obtained with all groups.	A systematic review of 55 primary studies of educational interventions that used the Defining Issues Test. Various groups of students were involved at the primary, secondary and tertiary level (including adult learners). Various types of programmes were considered and the duration of interventions varied from a few hours to a whole year.
Koepke ALW. Meta-analysis: educational strategies to promote value development. Indiana School of Nursing. Manuscript (250 pages).	A systematic review of 111 studies of the most effective methods of promoting value developments found case studies to be the most effective educational strategy. 6 to 12 hours of intervention were found to be the most effective strategy and interventions that lasted from 3-6 weeks yielded the greatest value development. Students in pre-school and in high school were the most receptive to these interventions. This systematic review concluded that value development can be promoted through educational methods advocated by Bandura's Social Learning Theory.	A systematic review of 111 published and unpublished studies including an analysis that removed 21 heterogeneous studies. Unpublished studies generated the highest effect size, a finding that is in contradiction to much of the systematic review literature. The overwhelming majority of studies were conducted during the 1970s and these studies produced the most value development.

EDUCATION: Sexual Education – Improving public understanding about Sexually Transmitted Infections (STIs) and how to prevent them

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Macke BA, Maher JE. Partner notification in the United States – an evidence-based review. American Journal of Preventive Medicine 1999; 17(3):230-42.	A systematic review concluded that there is good evidence that partner notification is an effective means of detecting sexually transmitted infections. Also there is “fair evidence” that provider referral generally ensures that more partners are notified and medically evaluated than does self referral.	A systematic review of a number of databases yielded 212 English language articles on partner notification 13 of which met the inclusion criteria of this review. More research is needed to improve elicitation and notification procedures and tailor them to specific populations. Research to assess the research of new testing techniques on partner notification, and to understand the consequences of partner notification for infected persons and their partners is also indicated.
Yamada J, DiCenso A, Feldman L, Cormillott P, Wade K, Wignall R, Thomas H. A systematic review of the effectiveness of primary prevention programs to prevent sexually transmitted diseases in adolescents. Hamilton, Ontario, Effective Public Health Practice Project. March 1999.	A systematic review of primary prevention programmes aimed at preventing STDs in adolescents aged 10-19 years found that it is possible to improve the behaviour of adolescents in ways which protect against STDs. Effective education interventions are theory-based, provide facts, and skill-building exercises, use trained facilitators, and last the minimum of eight hours. The review also found that such programmes do not lead to an increase in the number of adolescents who choose to become sexually active, or in the frequency of sexual intercourse. Those studies in the review which were stronger in design and had positive findings were conducted on high risk populations or female under graduates in the United States. This may limit the generalizability of the review’s findings.	A total of 584 articles were identified using 11 electronic databases from September 1998 to as far back as they were referenced, except for EMBASE which was searched from 1998 back to 1993. Key journals were handsearched from 1993 to October 1998. Reference lists from retrieved articles were searched and experts were contacted for unpublished studies. Each retrieved article was independently reviewed for quality and relevance by two reviewers. From these 584 articles 24 met the reviews inclusions criteria including being randomized or other types of controlled trials. Of these 24 none was rated ‘strong’ for methodology, 4 were rated ‘moderate’ and 20 were rated as ‘weak’. The 24 studies examined at least one of the six behavioural outcomes: improved condom use, number of sexual partners, frequency of sexual intercourse, frequency of unprotected sexual intercourse, and the number of diagnosed cases of STDs.
Cook RL, Rosenberg MJ. Do spermicides containing nonoxynol-9 prevent sexually transmitted infections? A meta-analysis. Sexually Transmitted Diseases 1998;25(3):144-50.	Nonoxynol-9- containing spermicides have an appreciable protective effect against both gonorrhoea and chlamydial infection, and a wider use of spermicides might substantially reduce the incidence of these diseases. However, insufficient data exist to judge their effect on HIV transmission, and further research on the effect of nonoxynol-9 on HIV transmission is urgently needed to make evidence-based clinical decisions and public health recommendations in the future.	Fairly good evidence for preventing gonorrhoea and chlamydial infections. Insufficient evidence for preventing HIV transmission.

EDUCATION: Sexual Education – Improving public understanding about Sexually Transmitted Infections (STIs) and how to prevent them

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Patrick MA. The control of sexually transmitted diseases in Canada: a cautiously optimistic overview. Canadian Journal of Human Sexuality 1997;6(2):79-87.	Successful interventions aimed at curable STDs include screening, curative therapy, and partner notification and treatment. With proper planning and implementation, STD control and prevention programmes can dramatically reduce STD morbidity.	Good quality overview with justified caution about the methodological quality of some primary studies.
Kirby D, Short L, Collins J et al. School-based programmes to reduce sexual risk behaviours: A review of effectiveness. Public Health Reports 1994;109:339-60.	A review of 23 studies of school-based programmes to reduce sexual risk behaviours. Some specific programmes delayed the initiation of intercourse, reduced the frequency of intercourse, reduced the number of sexual partners or increased the use of condoms and other contraceptives. These effective programmes were reported to have had the potential to reduce exposure to unintended pregnancies and sexually transmitted diseases including HIV infection.	A review commissioned by the Division of Adolescent and School Health within the Centres for Disease Control and Prevention, Public Health Service (USA). 23 studies that were published in professional journals and that measured the impact of programmes on behaviour were included. Additional research is needed to clarify the most important characteristics of effective programmes.

EDUCATION: Sexual Education – Improving public understanding about HIV/AIDS and how to prevent them

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Juarez O, Diez E. AIDS prevention among adolescents in school: a systematic review of the efficacy of interventions. <i>Gaceta Sanitaria</i> 1999;13(2): 150-62.	A systematic review of school AIDs prevention interventions. Amongst students aged 13 to 19 found that all the primary studies reviewed reported modified knowledge and attitudes. However the effect on intentions and behaviour of students was small (less than 10%).	A systematic review of 29 primary studies of which only 38% were considered of high or intermediate quality. The cautious conclusions of this systematic review seem warranted.
Weinhardt LS, Carey MP, Johnson BT, Bickham NL, Effects of HIV counselling and testing on sexual risk behaviour: a meta-analytic review of published research. <i>American Journal of Public Health</i> 1999;89(9):1397-1405.	HIV counselling and testing appears to provide an effective means of secondary prevention for HIV positive individuals but is not an effective <i>primary</i> prevention strategy for uninfected patients. HIV counselling as an education initiative seems justified for secondary prevention.	Good quality systematic review with carefully distinguished conclusions about primary (not effective) and secondary (effective) intervention.
Cook RL, Rosenberg MJ. Do spermicides containing nonoxynol-9 prevent sexually transmitted infections? A meta-analysis. <i>Sexually Transmitted Diseases</i> 1998;25(3):144-50.	Nonoxynol-9- containing spermicides have an appreciable protective effect against both gonorrhoea and chlamydial infection, and a wider use of spermicides might substantially reduce the incidence of these diseases. However, insufficient data exist to judge their effect on HIV transmission, and further research on the effect of nonoxynol-9 on HIV transmission is urgently needed to make evidence-based clinical decisions and public health recommendations in the future.	Fairly good evidence for preventing gonorrhoea and chlamydial infections. Insufficient evidence for preventing HIV transmission.
Kim N, Stanton B, Dickersin K, Galbraith J. Effectiveness of the forty adolescent AIDs risk reduction interventions: a quantitative review. <i>Journal of Adolescent Health</i> 1997;20: 204-15.	A systematic review of AIDs risk reduction interventions in the USA found that these interventions can be effective in improving knowledge (88%), attitudes (58%) and behavioural intentions (60%) and in reducing risk practices (73% change in condom use and 64% in decreasing number of sexual partners).	A systematic review of 5 electronic databases and hand searches of 11 journals published from January 1983 to November 1995 identified 40 studies that met pre-established inclusion criteria.

EDUCATION: Sexual Education – Improving public understanding about HIV/AIDS and how to prevent them

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Wolitski RJ, MacGowan RJ, Higgins DL, Jorgensen CM. The effects of HIV counseling and testing on risk-related practices and help-seeking behaviour AIDS Education and Prevention 1997;9(3):52-67.	A systematic review of 35 U.S. and international studies found that the evidence of the ability of HIV counselling and testing (HIV CT) to motivate changes in risk-related practices, and to promote help-seeking behaviour, was generally mixed. Many studies provided at least some evidence supporting the ability of HIV CT to motivate risk-reducing and help-seeking behaviour, but others did not. The pattern of results varied substantially across, and within, study populations and were often limited by considerable methodological weaknesses.	A systematic review of 35 U.S. and international studies published since 1991 grouped the studies that were identified into four categories according to subject population: (1) men who have sex with men, (2) injection and other drug users, (3) women and heterosexual couples, and (4) mixed samples recruited from sexually transmitted disease (STD) clinics and other settings. Considerable methodological weaknesses were identified in many of the primary studies. Consequently, the cautious conclusions of the systematic review seem warranted.
Peersman G, Oakley A, Oliver S, Thomas J. Review of effectiveness of sexual health promotion interventions for young people. London: EPI-Centre, 1996.	A systematic review of 122 evaluations of sexual health promotion interventions for young people aged 12-16 years, the majority of which were carried out in educational settings, identified 21 studies that were judged to be methodologically sound. Only 4 soundly designed evaluations described interventions that were effective in changing young peoples reported behaviour. The authors note that investing in health promotion interventions that have not been shown to work is not an effective or cost-effective strategy.	Only 21 outcome evaluations out of 122 that were identified in the literature were found to be methodologically sound. The authors note that evaluation design in the field of HIV/AIDS risk reduction, and general sexual health in young people, needs to be improved. The need for more randomized controlled trials is noted. Particular attention needs to be paid to the design of effective interventions for high risk young people including gay/bi-sexual young men, injecting drug users, homeless young people and those who are inconsistent school attenders.
Wingood GM, DiClemente RJ. HIV sexual risk reduction interventions for women: a review. American Journal of Preventive Medicine 1996;6:209-17.	A systematic review of HIV prevention interventions targeted toward women found that some interventions are efficacious at increasing condom use during sexual intercourse. Effective interventions emphasised gender-related influences, were peer led and used multiple intervention sessions.	A systematic review of MEDLINE, ERIC and PSYCLIT. Some methodological limitations of the primary studies that were identified are noted. The need for rigorous methodological research designs to evaluate intervention programmes was also noted.
Booth RE, Watters JK. How effective are risk reduction interventions targeting injecting drug users? AIDS, 1994;8(11):1515-24.	A systematic review of published HIV/AIDS risk-reduction interventions targeting IV drug users found that only two out of 66 studies reported consistent and significant differences between groups.	A systematic review of 66 published studies which focussed on research design issues and the ability of these studies to attribute interventions to outcomes. Several major weaknesses that cross cut many of the studies were identified. Only studies using 1-group pretest-post test (PTPT) control group designs were able to control for historical trends that might impact risk behaviours.

EDUCATION: Sexual Education – Improving public understanding about HIV/AIDS and how to prevent them

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Oakley A, Fullerton D. Risk, knowledge and behaviour: HIV/AIDS education programmes and young people. London SSRU 1994.	A systematic review of 12 sound evaluation studies of HIV/AIDS prevention found that 11 studies were judged to be effective, or partially effective. Only two studies demonstrated any impact on risk taking behaviours. The most effective approach to HIV/AIDS risk reduction among young people would appear to be ones that provide practical information and support in a non-didactic way, and that is based on a accurate qualitative assessment of young people's needs.	A total of 1300 studies in the area of sexual health promotion were identified using electronic and hand searches. 378 of these studies had a focus on young people, and 81 described evaluation of different approaches. Of these 36 were evaluations of outcomes relevant to HIV/AIDS prevention. Only 12 of these 36 studies were judged to be methodologically adequate in terms of using a control group, providing pre and post intervention data, and reporting on all relevant outcomes. Only 3 outcome evaluations were carried out in the UK, and none of these were considered methodologically sound. The need for higher quality evaluation studies of HIV/AIDS risk reduction, including the greater use of randomized controlled trials, is noted by the authors.
Oakley A, Fullerton D, Holland J et al. Review of effectiveness: HIV prevention and sexual health education interventions: SSRU Database Project Number 1. London SSRU 1994.	A systematic review of 15 sound evaluations of HIV/AIDS prevention found that the most effective interventions were skill-based, and used interviews or role play facilitated by peers or clinical psychologists in community settings to target behavioural or combined knowledge and behavioural outcomes.	A total of 1210 studies of sexual health interventions were identified using electronic and hand searches. A 114 of these were evaluations of interventions with a specific focus on HIV/AIDS. A methodological review of these 114 studies found that only 15 of the outcome evaluations were judged to be methodologically adequate in terms of using a comparison group, providing pre and post intervention data, and reporting on all relevant outcomes. Only 3 outcome evaluation studies were carried out in the UK and none of these were considered methodologically sound. The need for higher quality evaluation studies of HIV/AIDS prevention, including the greater use of randomized controlled trials, is noted by the authors.
Weller SC. A meta-analysis of condom effectiveness in reducing sexually transmitted HIV. Social Science and Medicine 1993;36:(12):1635-44.	Condoms are 87% effective in preventing pregnancy, but may reduce the risk of HIV infection by only about 69%. Thus, the efficacy of condom use in preventing HIV infection may be much lower than commonly assumed. Some caution in using the results of this systematic review is advised given the design limitations of the original studies.	Systematic review suggesting some caution is required in accepting the findings on the efficacy of condom use given the design limitations of some primary studies.

EDUCATION: Helping teenage parents complete education and learn parenting skills

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Barlow J. Systematic review of the effectiveness of parent-training programmes in improving behaviour problems in children aged 3-10 years. Oxford, Health Services Research Unit, Institute of Health Sciences. ISBN: 1874551251.	A systematic review found that group based parent-training programmes have a positive effect on the behaviour of children aged 3 to 10 years. This finding was consistent across parent-report outcome measures and, to a lesser extent, independent observations of children's behaviour. One study indicated that community group-based parent-training programmes produced greater change in children's behaviour than individual clinic-based programmes. There was also some evidence to suggest that group-based programmes may be up to six times as cost effective and more acceptable to many parents. While the behavioural programmes appeared to be more effective in changing children's behaviour than Parent Effectiveness Training (PET), and Adlerian programmes, there is currently insufficient research on the effectiveness of the 'relationship' programmes	255 studies of parent-training programmes were identified of which 16 met the inclusion criteria of the review. All 16 studies were randomized controlled trials, and critical appraisal showed that they were of variable quality. The author notes that there is currently insufficient research to demonstrate which aspects of group parent-training programmes are the decisive factor in bringing about change. The only study using a placebo control group in which parents presented and discussed their concerns about parenting with other group members, and in which no set parent-training curriculum was used, showed that there were no significant differences in the results in placebo and treatment groups. The author also notes the need for further research on which parents benefit from the different types of programme available.
Hodnett ED, Roberts I. Home-based social support for socially disadvantaged mothers. [Cochrane Review]. In: The Cochrane Library Issue 1, 2000 Oxford: Update Software.	A systematic review concluded that postnatal home based support programmes appear to have no risks and may have benefits for socially disadvantaged mothers and their children, possibly including reduced rates of child injury.	Systematic review of randomized and quasi-randomized trials of one or more postnatal home visits with the aim of providing additional home based support for socially disadvantaged women who had recently given birth (compared to usual care) identified 11 studies involving 2992 families. Most of the trials had important methodological limitations consequently some caution is advised when considering the findings of this review.
Das-Eiden R, Reifman A. Effects of Brazelton demonstrations on later parenting: a meta-analysis. Journal of Pediatric Psychology 1996;21(6):857-68.	Indicating that Brazelton-based interventions during the neonatal period have a small-moderate beneficial effect on the quality of later parenting.	Only published studies (n=13) were included in this analysis, with one effect size entered for each study. Analyses were conducted by weighting each study equally (unit weighting) and also by sample size. The possibility of bias from using only published studies should be noted.
Van Ijzendoorn MH, Juffer F, Duyvesteyn MG. Breaking the intergenerational cycle of insecure attachment: a review of the effects of attachment-based interventions on maternal sensitivity and infant security. Journal of Child Psychology and Psychiatry and Allied Disciplines 1995;36(2):225-48.	A systematic review of preventive or therapeutic interventions aiming at enhancing parental sensitivity and children's attachment security is addressed. Results show that interventions are more effective in changing parental insensitivity (d=58) than in changing children's attachment insecurity (d=17). Longer more intensive, and therapeutic interventions appear to be less effective than short-term preventive interventions.	Sixteen pertinent studies have been reviewed and 12 studies have been included in a quantitative systematic review (N=869)

EDUCATION: Helping teenage parents complete education and learn parenting skills

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Jones LC. A meta-analytic study of the effect of childbirth education on the parent infant relationship. Healthcare Women International 1986;7:357-70.	A systematic review found that childbirth education is beneficial to the parent infant relationship. A greater magnitude of effect was found for middle income parents as compared with parents with low income. Moderate effects were found in both the behavioural and attitudinal components of the parent infant relationship.	A systematic review of 27 studies published between 1960 and 1981. Several methodological floors in the primary studies were found including researcher allegiance to childbirth education, unblinded procedures and the use of instruments without reliability or validity testing. Caution is advised in using or interpreting this review.

EDUCATION: Tackling drugs – alcohol

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
McArthur DL, Kraus JF. The specific deterrence of administrative per se laws in reducing drunk driving recidivism. <i>American Journal of Preventive Medicine</i> 1999;16(1):68-75.	A systematic review of the effects of administrative per se laws in reducing drunk driving recidivism, traffic accidents and other alcohol related driving offences by drivers with suspended licenses found these interventions to be effective in some states (of the USA) but not others.	A systematic review of studies with comparison groups and providing relevant data that lead to an objective assessment of recidivism. Types of studies included were randomized controlled trials, non randomized controlled trials, other specialised cohort studies and case control studies. Only 3 studies met the inclusion criteria. The small number of studies, and the evidence of differential effectiveness in different states, suggests that caution should be exercised in interpreting or using this review.
Murphy-Brennan MG, Oei TP. Is there evidence to show that fetal alcohol syndrome can be prevented? <i>Journal of Drug Education</i> 1999;29(1):5-24.	A review (of uncertain nature) of prevention programmes aimed at preventing fetal alcohol syndrome suggest that they have been successful in raising awareness of FAS across the groups examined but not successful in changing drinking behaviour in high risk groups. It concludes that prevention programmes have had minimal or no impact of lowering the incidence of FAS and that “urgent steps must now be taken to fully test prevention programmes, and find new strategies involving both sexes, to reduce and ultimately eliminate the incidence of FAS.	A narrative review of articles on the effectiveness of prevention programmes aimed at fetal alcohol syndrome. The possibility of selection and publication bias should be noted and caution exercised in using the evidence provided by this review.
Black DR, Tobler NS and Sciacca JP. Peer helping/involvement: an efficacious way to meet the challenge of reducing alcohol, tobacco and other drug use among youth: a meta-analysis. <i>Journal of School Health</i> 1998;68(3):87-93.	Peer-led drug prevention programs for middle school students are reviewed for their effectiveness in minimising the use of alcohol, tobacco, and other drugs (ATOD). The authors conclude that peer interventions for middle school students are statistically superior to non-interactive didactic, lecture programs led by teachers/researchers.	A systematic review of 120 primary studies of school-based drug prevention programs
Foxcroft DR, Lister-Sharpe D, Lowe G. Alcohol misuse prevention for young people: a systematic review reveals methodological concerns and lack of reliable evidence of effectiveness, <i>Addiction</i> 1997;97(5)531-7.	A systematic review of 33 studies of alcohol misuse prevention found that there was a lack of reliable evidence and that no one type of prevention programme can be recommended. The need to carry out well designed scientific evaluations of the effectiveness of current or new prevention efforts which target young people’s alcohol misuse is indicated.	A good systematic review with cautious notes about the reliability of evidence on alcohol prevention programmes for young people.

EDUCATION: Tackling drugs - alcohol

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Wells-Parker E, Bangert-Drowns R, McMillen R, Williams M. Final results from a meta-analysis of remedial interventions with drink/drive offenders. <i>Addiction</i> 1995;90:907-26.	A systematic review of the efficacy of remediation with drinking/driving offenders found that combinations of interventions, in particular those including education, psychotherapy/counselling and follow up contact/probation were more effective than other evaluated modes for reducing drinking/driving recidivism. The average effect of remediation on drinking/driving recidivism was an 8-9% reduction over no remediation.	A systematic review of 215 primary studies controlled for methodological quality found that better quality studies were associated with smaller effect size and less variation in effect size. Treatment effects are probably under estimated in the literature due to over emphasise on education as a treatment for all offenders and drinks/driving recidivism as the most frequent measure of outcome. The limitation of primary studies is discussed.
Rundell TG, Bruvold WH. A meta-analysis of school-based smoking and alcohol use prevention programs 1988; 15(3):317-34.	A systematic review of school-based intervention programs for smoking and alcohol found equally modest effects on immediate behavioural outcomes. Smoking interventions, however, have been more successful than alcohol interventions in altering students' long-term behaviour. Social reinforcement, social norms and developmental behaviour models are more effective than traditional awareness programs designed to inform adolescents about the health risks associated with tobacco and alcohol use.	A systematic review of 47 smoking and 29 alcohol school-based intervention programs published after 1970. 29 out of 33 smoking studies, and 19 out of 31 alcohol studies successful changes students attitudes.

EDUCATION: Tackling drugs – smoking/tobacco

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Hughes JR, Stead LF, Lancaster T. Anxiolytics and antidepressants for smoking cessation. [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.	A systematic review of the use of anxiolytics and antidepressants for smoking cessation concluded that there is little evidence that anxiolytics are effective for this purpose but that some antidepressants (bupropion and nortriptyline) may be effective. It is unclear whether these effects are specific for individual drugs, or a class effect.	A systematic review of randomized controlled trials comparing anxiolytics or antidepressants to placebo or an alternative therapeutic control for smoking cessation identified 6 trials of anxiolytics and 8 trials of antidepressants. Trials with less than 6 months follow up were excluded.
Sowden AJ, Arblaster L. Community intervention for preventing smoking in young people. [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.	A systematic review of the effectiveness of community interventions for preventing smoking in young people found that there is some limited support for such programmes. The importance of building upon elements of existing programmes that had shown to be effective was noted. Programmes need to be flexible to the variability between communities and responsive to different target groups. Programme messages and activities should be guided by theoretical constructs about how behaviours are acquired and maintained (eg social learning theory). Community activities must reach the intended audience if they are to stand any chance of success.	A systematic review of MEDLINE and 21 other electronic databases, plus the Cochrane Tobacco Addiction Groups specialised register. Bibliographies of identified studies were checked and contact was made with content area specialists. 13 studies were included in the review. 44 studies did not meet all the inclusion criteria. All studies used a control trial design with 4 using random allocation of schools or communities. The need for more rigorous methodological procedures in primary studies was noted.
White AR, Rampes H, Ernst E. Acupuncture for smoking cessation. [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.	A systematic review of acupuncture for smoking cessation found no clear evidence for its effectiveness. Acupuncture was not superior to sham acupuncture in smoking cessation at any time point when compared with other anti smoking interventions there was no differences in outcome at any time point. Acupuncture appeared to be superior to no intervention in the early results but this difference was not sustained.	A systematic review of randomized controlled trials comparing a form of acupuncture with either sham acupuncture, another intervention or no intervention for smoking cessation. 20 comparisons were identified in 18 publications. Odds ratio and confidence intervals are presented.
Black DR, Tobler NS, Sciacca JP. Peer helping/involvement: an efficacious way to meet the challenge of reducing alcohol, tobacco and other drug use among youth: a meta-analysis. <i>Journal of School Health</i> 1998;68(3):87-93.	Peer-led drug prevention programs for middle school students are reviewed for their effectiveness in minimising the use of alcohol, tobacco, and other drugs (ATOD). The authors conclude that peer interventions for middle school students are statistically superior to non-interactive didactic, lecture programs led by teachers/researchers	A systematic review of 120 primary studies of school-based drug prevention programs

EDUCATION: Tackling drugs – smoking/tobacco

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Gourlay SG, Stead LF, Benowitz NL. Clonidine for smoking cessation. [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.	Clonidine is an anti hypertensive agent which acts on the central nervous system and may reduce withdrawal symptoms in various addictive behaviours including tobacco use. This systematic review, based on a small number of trials found that Clonidine is effective in promoting smoking cessation. However prominent side effects limits its usefulness for smoking cessation.	A systematic review of randomized trials of Clonidine vs placebo with a smoking cessation end point of at least 12 weeks following treatment. Identified 6 trials which met the inclusion criteria. 3 trials were or oral use of Clonidine and 3 were of transdermal use ie patch. Pooled odds ratio and confidence intervals are presented. Some potential sources of bias in the trials identified is noted.
Sowden AJ, Arblaster L. Mass media interventions for preventing smoking in young people. [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.	A systematic review of the effectiveness of mass media campaigns in preventing the uptake of smoking in young people concluded that such programmes can be effective but overall the evidence is not strong. Important characteristics of effective mass media campaigns include developing media messages that are appropriate to the target groups, using theoretical concepts about how behaviours are required and maintained, having sufficient intensity, frequency and duration of campaigns so as to have a reasonable chance of being effective and using radio and TV according to the age of the target group.	A systematic review of MEDLINE and 28 other electronic databases, plus handsearching of key journals, bibliographic checks and contact with content area specialists. Only 6 out of 63 studies met all the inclusion criteria which included using a controlled trial design. Two of these 6 studies concluded that mass media were effective in influencing the smoking behaviour in young people. Rigorous evaluation of mass media campaigns seems to be lacking and needs to be improved for the future.
Hajek P, Stead LF. Aversive smoking for smoking cessation. [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.	A systematic review of the efficacy of rapid smoking and other aversive therapy methods for smoking cessation found insufficient evidence to determine its effectiveness or whether there is a dose-response relationship to aversive stimulation.	A systematic review of randomized controlled trials which compared aversion treatments with 'inactive' procedures or which compared aversion treatments of different intensity for smoking cessation identified 24 trials which met inclusion criteria. A funnel plot of included studies was asymmetric due to the relative absence of small studies with negative results. Most trials had a number of serious methodological problems likely to lead to spurious positive results. The only trial using biochemical validation of all self reported cessation gave a non significant result.

EDUCATION: Tackling drugs – smoking/tobacco

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Lichtenstein E, Glasgow RE, Lando HA, Ossip-Klein DJ et al. Telephone counseling for smoking cessation: rationales and meta-analytic review of evidence. Health Education Research 1996;11(2):243-57.	A systematic review of telephone counseling for smoking cessation suggested that reactive approaches attract only a small percentage of smokers but are sensitive to promotional campaigns. They appear to be efficacious and useful as a public intervention for large populations. Proactive phone counseling showed significant short-term (3-6 mo) effects. 4 found substantial long-term differences. A significant increase in smoking cessation rates was found when compared with control groups. Proactive phone counseling appeared most effective when used as the sole intervention modality or when augmenting programs initiated in hospital settings.	A systematic review of 13 randomized trials using Slavin's best evidence synthesis.
Reid D. Tobacco control – overview. British Medical Bulletin 1996;52(1): 108-20.	An overview of the principle components of an effective tobacco control programme found that national targets for the reduction of smoking prevalence are more likely to be achieved through the use of high reach interventions such as fiscal policy and mass communications. Restrictions on smoking at work may contribute to declines in consumption. Advice from health professionals, though effective, has limited impact owing to low reach. Measures aimed primarily at youth can delay but not prevent recruitment to smoking. Media publicity not only reduces smoking but also creates a climate of opinion in favour of effective measures such as fiscal policy.	An overview of the literature on tobacco control which does not appear to meet the standards of a systematic review consequently the potential for bias should be noted as should its limitations from the point of view of effective policy and practice.
Rooney BL, Murray DM. A meta-analysis of smoking prevention programs after adjustment for errors in the use of analysis. Health Education Quarterly 1996;23(1):48-64.	A systematic review of school-based smoking prevention programs based on peer or social-type programs suggests that the average effect is limited in magnitude. The reduction in smoking may be only 5%. Even under optimal conditions, the reduction in smoking may be only 20-30%.	A systematic review of 90 primary studies published 1974-1991. Treatment characteristics were used to predict an effect size after adjustment for study design and population characteristics, and in particular after a post hoc correction for errors in the original unit of analysis.

EDUCATION: Tackling drugs – smoking/tobacco

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Stead, M. Hastings G, Tudor-Smith C. Preventing adolescent smoking: a review of options. Health Education Journal. 1996;5531-54.	Adolescent smoking remains a major health promotion challenge in Wales. Between 1986 and 1994, the Welsh Youth Health Surveys have indicated that prevalence of regular smoking among 15-year olds has increased from 16 per cent to 18 per cent for males and from 20 per cent to 26 per cent for females, and that females in Wales have one of the highest levels of adolescent smoking in Europe. The Health for All in Wales targets call for regular smoking among 15-year-olds to be reduced. This review was commissioned by Health Promotion Wales to inform and guide a new programme of work aimed at reducing adolescent smoking prevalence, particularly among females. A review was conducted of recent published research data and recommendations on adolescent smoking from the UK, North America, Australasia and Europe.	A systematic review of published research data and recommendations on adolescent smoking from the UK, USA, Australasia and Europe. Databases searched included MEDLINE, SSCI, ASSIA, CINAHL and The Health Promotion Library, Scotland. Papers in the English language published between 1989 and 1995 were included. The bulk of the papers comprised original research using quantitative samples large enough to yield statistically significant results. Other types of paper included were discussion articles from expert tobacco control committees/groups, pilot studies, and studies using qualitative methods.
Law M, Tang JL. An analysis of the effectiveness of interventions intended to help people stop smoking. The Archives of International Medicine 1995;1(55):1933-41.	A systematic review of the efficacy of interventions to help people stop smoking found that personal advice and encouragement given by physicians during a single routine consultation has a modest (2%) but cost effective effect on smoking cessation. Follow up letters or visits have an additional effect. Advice and encouragement are particularly effective for smokers at special risk such as pregnant women (efficacy equals 8% and patients with ischemic heart disease). Behaviour modification techniques are also effective but no more so than simple advice giving by a physician (they are also several times more expensive). Nicotine replacement therapy is effective in an estimated 13% of smokers seeking cessation. The effect of hypnosis, acupuncture and other pharmacological treatments are not proven.	A systematic review of 188 randomized controlled trials of the efficacy of interventions intended to stop people smoking.
Dolan-Mullen P, Ramirez G and Groff JY. A meta-analysis of randomized trials of prenatal smoking cessation interventions. American Journal of Obstetrics and Gynecology 1994;1328-34.	A systematic review of prenatal smoking cessation interventions found that these were effective in terms of smoking cessation during pregnancy and reducing the incidence of low birth weight.	A systematic review of 11 randomized controlled trials with objective validation of smoking status, 4 of which also measured rates of low birth weight. Risk ratios consistently favoured experimental groups for smoking cessation, and for two of the four studies which measured low birth weight.

EDUCATION: Tackling drugs – smoking/tobacco

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Fiore MC, Smith SS, Jorenby DE , Baker TB. The effectiveness of the nicotine patch for smoking cessation. Journal of the American Medical Association 1994;271:1940-7.	A systematic review found that nicotine patch is an effective aid to stopping smoking across the range of strategies of patch-use. Active patch subjects were more than twice as likely to quit smoking as individuals wearing a placebo patch and this effect was present at both high and low intensity of counselling. The nicotine patch has the potential to improve public health significantly.	A systematic review of nicotine patch efficacy studies published up until September 1993 and identified using MEDLINE, PSYCLIT and the Food and Drug Administration new drug applications. Only double-blind, placebo-controlled nicotine patch studies of four weeks or longer with random assignment of subjects, biochemical confirmation of abstinence and subjects not selected on the basis of specific diseases (eg coronary heart disease were included). This yielded 17 primary studies with an N of 598 patients.
Silagy C, Mant D, Fowler G, Lodge M. Meta-analysis on efficacy on nicotine replacement therapies in smoking cessation. Lancet 1994;343:139-42.	A systematic review of nicotine replacement therapy (NRT) by chewing gum, transdermal patch, intranasal spray or inhalation found that all the currently available forms of NRT are effective therapies to aid smoking cessation.	A systematic review of published and unpublished randomized controlled trials of NRT that have assessed abstinence at least 6 months after the start of NRT were identified and 53 trials (42 gum, 9 patch, 1 intranasal spray, 1 inhaler) with data from 17703 subjects were included in the analyses. Odds ratio consistently favoured use of NRT.
Wisborg K, Obel C, Henriksen TB, Hedegaard M, Secher NJ. Strategies for smoking cessation among pregnant women. Ugeskrift for Laeger 1994;156: 4119-24.	A systematic review of intervention studies directed towards smoking cessation during pregnancy found that it is possible to reduce smoking during pregnancy only by an efficient and personal effort performed by a committed person towards each pregnant woman.	A systematic review of Scandinavian and English randomized controlled intervention studies. The intervention studies included anti-smoking advice, self help manuals, measurements of smoking dependent chemical factors, and multi factorial methods.
Matson DM,. Lee JW, Hopp JW. The impact of incentives and competitions on participation and quit rates in worksite smoking cessation programmes. American Journal of Health Promotion, 7(4):270-80.	A systematic review of incentives and competitions on participation and quit rates in worksite smoking cessation programmes found that incentives positively influenced participation rates, and had some effect on smoking reduction. No study, however, showed that incentives and/or competition enhanced smoking cessation past 6 months.	A systematic review identified 15 evaluations of smoking cessation programmes that had a quasi-experimental or experimental design and were published between 1966 and 1992. Only 8 of these 15 studies had an appropriate comparison group that allowed separation of the effects of incentives and competitions from other programme elements. Only 1 study separated the effects of competition from incentives with competition. Consequently, the evidence from these studies is weak.
Walsh R, Redman S. Smoking cessation in pregnancy: do effective programmes exist? Health Promotion International 1993;8:111-27.	A systematic review of controlled evaluations of smoking cessation interventions during pregnancy found that cognitive behavioural smoking cessation programmes in pregnancy are effective and that there was insufficient evidence to determine whether advice feedback or nurse home visitation programmes improved smoking cessation during pregnancy.	A systematic review of smoking cessation programmes during pregnancy identified 20 controlled evaluations of which 12 were judged to be methodologically inadequate and were excluded from the review.

EDUCATION: Tackling drugs – smoking/tobacco

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Fisher KJ, Glasgow RE, Terborg JR. Worksite smoking cessation: A meta-analysis of long-term quit rates from controlled studies. <i>Journal of Occupational Medicine</i> 1990;32(5):429-39.	A systematic review of 20 controlled studies of work site smoking cessation interventions found a modest but significant overall effect. Interventions conducted in smaller work sites, which lasted 2-6 hours, and which contained heavy smokers, were associated with the largest effect sizes. Quit rates were also associated with these factors plus programmes that included a cessation group, were not overly complicated, and that shared company and employee time.	A systematic review of 20 controlled studies of work site smoking cessation interventions yielding a total of 34 comparisons of long-term (average = 12 months) quit rate. An overall mean effect size of .21 +/- .07 (p<.01) was found. The weighted average follow up quit rate from all interventions was 13%.
Kottke TE, Battista RN, DeFries GH, Brekke ML. Attributes of successful smoking cessation interventions in medical practice. A meta-analysis of 39 controlled trials. <i>Journal of the American Medical Association</i> 1988;259(19):2883-9.	A systematic review of 39 controlled smoking cessation trials found that success six months after the initiation of intervention was related to the type of intervention (face-to-face advice being better than all others), type of intervener (both physician and non-physician counsellors were better than either alone and the number and duration of reinforcing sessions. The number of modalities used by the intervention was also predictive of success, and was of borderline statistical significance.	A systematic review of 108 intervention comparisons in 39 controlled trials of smoking cessation.
Rundell TG, Bruvold WH. A meta-analysis of school-based smoking and alcohol use prevention programs 1988; 15(3):317-34.	A systematic review of school-based intervention programs for smoking and alcohol found equally modest effects on immediate behavioural outcomes. Smoking interventions, however, have been more successful than alcohol interventions in altering students' long-term behaviour. Social reinforcement, social norms and developmental behaviour models are more effective than traditional awareness programs designed to inform adolescents about the health risks associated with tobacco and alcohol use.	A systematic review of 47 smoking and 29 alcohol school-based intervention programs published after 1970. 29 out of 33 smoking studies, and 19 out of 31 alcohol studies successful changes students attitudes.
Lam W, Sze PC, Sacks HS, Chalmers TC. Meta-analysis of randomised controlled trials of nicotine chewing gum. <i>The Lancet</i> 1987;4(2):27-30.	The proper use of nicotine chewing gum in specialised clinics will increase the rate of stopping patients smoking, but the use of the gum in general medical practice is questionable.	Systematic review indicating nicotine chewing gum is more effective in specialised clinics than in general practice. (See also Stapleton 1998 above).

EDUCATION: Tackling drugs – other substances

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Tobler NS, Lessard T, Marshall D, Ochshorn P, Roona M. Effectiveness of school-based drug prevention programmes for marijuana use. a meta-analysis. <i>School Psychology International</i> 1999;20(1):105-37.	Non-interactive lecture-oriented prevention programmes that stressed knowledge about drugs affecting development of students showed minimal reductions in marijuana use. Interactive programmes that fostered the development of social competencies showed greater reductions in marijuana use. The primary finding for prevention programme planners is that interactive cultivation of social skills reduces marijuana use.	A good systematic review of X studies supporting interactive education methods as being more effective than non-interactive. This systematic review confirms findings of other meta-analyses.
Black DR, Tobler NS, Sciacca JP. Peer helping/involvement: an efficacious way to meet the challenge of reducing alcohol, tobacco and other drug use among youth: a meta-analysis. <i>Journal of School Health</i> 1998;68(3):87-93.	Peer-led drug prevention programs for middle school students are reviewed for their effectiveness in minimising the use of alcohol, tobacco, and other drugs (ATOD). The authors conclude that interactive peer interventions for middle school students are statistically superior to non-interactive didactic, lecture programs led by teachers/researchers	A systematic review of 120 primary studies of school-based drug prevention programs
White D, Pitts M. Educating young people about drugs: A systematic review. <i>Addiction</i> 1998;93(10):1475-87.	Systematic review showed that the impact of evaluated interventions was small and that gains were dissipated over time. Interventions targeting hard to reach groups have not been adequately evaluated.	A systematic review which noted that evaluations of school-based interventions against drug misuse tend to target alcohol, tobacco and marijuana, and are methodologically stronger than studies of interventions targeted at other drugs and taking place outside of schools.
Dusenbury L, Falco M, Lake A. A review of the evaluation of 47 drug abuse prevention curricula available nationally. <i>J-Sch-Health</i> . 1997;67(4): 127-32.	A vote counting review which found that only 10 of 47 primary prevention curricula for alcohol and other drugs. Amongst P-12 grades met acceptable evaluation standards. Generally favourable outcomes (8 out of the 10 studies) were reported in terms of preventing alcohol and other drug abuse.	A vote counting systematic review with inclusion and exclusion criteria that resulted in only 10/47 curricula being included in the review.

EDUCATION: Tackling drugs – other substances

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Ennett ST, Tobler NS, Ringwalt CL, Flewelling RL. How effective is drug abuse resistance education? A meta-analysis. <i>American Journal of Public Health</i> 1994;85(6):873-74.	The Drug Abuse Resistance Education (DARE) programme is the most widely used school-based drug prevention programme in the United States. DARE's effect sizes were substantially smaller than those of programmes emphasising social and general competencies and using interactive teaching strategies.	A systematic review of eight methodologically rigorous DARE evaluations. Weighted effect size means for several short-term outcomes were compared with means reported for other drug use prevention programs.
Hansen WB. School-based substance abuse prevention – a review of the state of the art in curriculum, 1980-1990. <i>Health Education Research</i> 1992;7:403-30.	A review of substance use prevention studies classified primary studies in terms of 12 content areas and identified 6 groups of programmes (information/values clarification, affective education, social influence, comprehensive, alternatives, and incomplete programmes. The review concluded that comprehensive and social influence programmes are the most successful in preventing the onset of substance abuse.	A review of substance use prevention studies published between 1980 and 1990 reports are analysed for two major threats to validity, selection bias and statistical power. Programme groups generally have similar selection biases, but have important differences in statistical power.
Bruvold WH. A meta-analysis of the California school-based risk reduction programme. <i>Journal of Drug Education</i> 1990;20(2):139-52.	Information-focused interventions on drug use have more impact upon knowledge, but less upon attitudes and behaviour, whereas alternative interventions have less impact upon knowledge but more upon attitudes and behaviour.	A systematic review performed upon eight risk-reduction programs meeting six standard methodological requirements for evaluation research.
Bangert Drowns RL. The effects of school-based substance abuse education - a meta-analysis. <i>Journal of Drug Education</i> . 1988;18(3):243-64.	Typical substance abuse education had most positive effects on knowledge and attitudes, but was unsuccessful in changing drug-using behaviours of students. Attitudinal effects were significantly higher when peers were instructional leaders and when group discussion was part of instructional mode. Students who volunteered for substance abuse education reported lower drug use after treatment than did students who were required to participate in such programmes	A high quality systematic review of 33 evaluations of school-based alcohol and drug education programs.
Tobler NS. Meta-analysis of 143 adolescent drug prevention programs - Quantitative outcome results of program participants compared to a control or comparison group. <i>Journal of Drug Issues</i> . 1986;16:537-67.	Peer programmes were significantly different from the combined results of all comparison/control groups. Peer programmes maintained high effect size for alcohol, soft drugs and hard drugs, as well as for cigarette use	A high quality systematic review of 143 adolescent drug prevention programmes

EDUCATION: Tackling drugs – other substances

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Schaps E, Churgin S, Palley CS, Takata B. Primary prevention research: a preliminary review of programme outcome studies. International Journal of Addiction 1980;15:657-76.	A review of 35 drug abuse prevention programme evaluation studies found that the “new generation” prevention strategies (ie affective, peer-oriented, and multi dimensional) approaches may produce more positive and fewer negative outcomes than older drug information approaches. Caution is advised due to the methodological inadequacy of some primary studies.	A review of 35 drug abuse prevention programme evaluation studies of which the scientific rigor of the research was found to be frequently inadequate. The rigor of research was negatively correlated with the intensity and duration of programme services. The authors advise that the findings of this review must be approached with great caution.

EDUCATION: Diet and nutrition

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Brug J, Campbell M, van Assema P. The application and impact of computer generated personalised nutrition education: a review of the literature. Patient Education and Counselling 1999; 36(2):145-56.	A literature review of computer generated nutrition education found that this is more likely to be read, remembered and experienced as personally relevant than our standard educational materials. Computer tailored nutrition education also appears to have a greater impact in motivating people to change their diet and their fat intake in particular. At present no definite conclusions can be drawn.	A review of 8 published studies that have assessed the impact of comprehensive computer generated nutrition interventions based on behaviour change theory. The selective nature of the review due to its theoretical focus, and the authors acknowledgement that no definite conclusions can be drawn should be noted.
McArthur DB. Heart healthy eating behaviors of children following a school-based intervention: a meta-analysis. Issues in Comprehensive Pediatric Nursing. 1998;21(1):35-48.	A systematic review of the effects of school-based interventions on heart healthy eating behaviours of fourth and fifth grade students found that these interventions had a significant effect on the student participants.	A systematic review identified 12 studies of school-based interventions on 4 th and 5 th grades students. The overall effect size (d value) across 12 studies was 24. The 95% confidence interval ranged from .174 to .301.
Hursti UK, Sjoden P. Changing food habits in children and adolescents: experiences from intervention studies. Scandinavian Journal of Nutrition 1997; 41:102-10.	A systematic review of school or community based studies using experimental or quasi experimental design reported only modest changes in the outcome measures (changes in eating habits) and only 3 report maintenance of the effects of interventions. Even moderate changes in dietary risk factors for cardiovascular disease may be beneficial if maintained over long periods.	A systematic review of experimental and quasi experimental studies during the 1980s and the 1990s.
Levy SR, Iverson BK, Walberg HJ. Nutrition-education research: An interdisciplinary evaluation and review. Health Education Quarterly 1980;7:107-26.	The more interdisciplinary criteria a study fulfils, the more likely it is to influence knowledge, behaviour, and attitudes with respect to nutrition	An interdisciplinary review which compared school nutrition education programs systematically 6 out of 22 studies met inclusion criteria for the review and effect sizes were reported.

EDUCATION: Work based health promotion

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Landbergis PA, Cahill J, Schnall P. The impact of lean production and related new systems of work organisation on worker health. <i>Journal of Occupational Health Psychology</i> 1999;4(2):108-30.	A review (nature uncertain) of studies of the impact of different work practices on injuries and illness found little evidence to support the hypothesis that lean production empowers auto workers in fact auto industry studies suggest that lean production creates intensified work pace and demands. Increases in decision authority and skill levels are modest, or temporary whereas decision latitude typically remain low thus lean production and new systems of work organisation can be considered to have job strain and possibly poor effects on health.	A review of studies on different work practices. The nature of this review is unclear and seems not to meet the standards of a systematic review. Some degree of selection and publication bias is suggested. Consequently caution should be exercised when interpreting the findings of this review.
Peersman G, Harden A, Oliver S. Effectiveness of health promotion interventions in the workplace: a review. London, Health Education Authority 1998.	A systematic review on workplace health promotion programmes, most of which were undertaken in the United States of America, identified a number of studies from which general pointers to potential success of such interventions can be derived. However the author's note that most of the evaluations of these programmes were methodologically flawed due to the absence of a control or comparison group. Consequently, little can be concluded about these studies that is valid and reliable. The effectiveness of different approaches to workplace health promotion is likely to be influenced by different organizational cultures. The enormous potential for the workplace as a setting for improving the health of the adult population is noted.	The evidence concerning the effectiveness of workplace health promotion is generally weak due to a number of methodological flaws in the design and execution of programme evaluations. The absence of comparison or control groups is particularly troublesome. The inclusion criteria for this review were developed with the aim of including studies based on participatory methods, as these were considered more likely to be relevant and acceptable in the workplace. Other criteria included studies that gathered both process and outcome measures as these presented a better picture of whether, and how, the intervention has worked.
Innes E. Education and training programmes for the prevention of work injuries: do they work? <i>Journal of Prevention, Assessment and Rehabilitation</i> 1997;9(3):221-32.	A narrative literature review of education and training programmes to deal with the prevention of occupational injuries and diseases suggested that they can be effective in reducing risk and injury when used in combination with other controlled systems. They seem to be particularly effective in preventing back injuries.	A narrative review of the format structure and content of programmes applied to a model addressing behaviour change (the health belief model). The uncertain nature of the search procedures, and of their comprehensiveness, suggests the possibility of both selection and publication bias consequently the conclusions of this review should be used with caution.

EDUCATION: Work based health promotion

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Lusk SL. Health promotion and disease prevention in the worksite. Annual Review of Nursing Research 1997;15: 187-13.	A review of 73 US and Canadian studies on health promotion/disease prevention programmes in the worksite found that nearly all (68 out of 73) of the published studies obtained positive results in terms of benefiting health or reducing costs. The Johnson and Johnson “Live for Life” Programme is presented as an exemplar of a comprehensive, multi faceted, worksite health promotion disease prevention programme whose effects are consistently assessed.	A systematic review of published studies on health promotion/disease prevention programmes in the worksite between 1990 and 1994.
Sparks K, Cooper C, Yitzhak F, Shirom A. The effects of hours of work on health: a meta-analytic review. Journal of Occupational and Organisational Psychology 1997;70(4):391-408.	A quantitative and qualitative review of existing literature on working hours and health including a systematic review on 21 study samples concluded that there is a link between the hours worked and ill health. A small but significant positive mean correlation between overall health symptoms, physiological and psychological health symptoms and hours of work was found. The implications are that limiting the hours people work has a beneficial effect on their health.	A quantitative and qualitative review and a meta analysis of 21 studies. The qualitative analysis of 12 other studies supported that findings of the meta analysis of a positive relationship between hours or work and ill health.
Verhoeven C, Johanna M. Wellness effects of a worksite health promotion program. Leiden University Press 1997; 255.	A systematic review of the effectiveness of European Worksite Health Promotion Programmes found that the total wellness-health promotion programme was effective in establishing improvements in working conditions and decreases in sick leave related absenteeism. The programme aimed at avoiding stress situations at work and increasing latitude in employees decision making.	A systematic review in the form of a book publication which noted that there were few experimental or quasi-experimental studies of worksite health promotion programmes and that those which do exist differ substantially in terms of the interventions applied and the outcome measures used. Consequently the accumulative evidence of worksite health promotion programmes is weak.
Wilson MG, Jorgensen C, Cole G. The health effects of worksite HIV/AIDS intervention: A reviews of the research literature, American Journal of Health Promotion 1996;11(2):150-7.	A systematic (vote counting) review of the individual and organisational health effects of HIV/AIDS interventions conducted at the worksite concluded that 10 of the 12 studies reviewed reported positive effects of employee education programmes on knowledge and attitudes. Methodological weaknesses should be noted.	A vote counting review of 12 studies on worksite HIV/AIDS educational interventions, of which 9 studies lacked a comparison or control group. Consequently, the evidence on the effectiveness of these interventions is weak.

EDUCATION: Work based health promotion

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Matson DM, Lee JW, Hopp JW. The impact of incentives and competitions on participation and quit rates in worksite smoking cessation programmes. American Journal of Health Promotion, 7(4):270-80.	A systematic review of incentives and competitions on participation and quit rates in worksite smoking cessation programmes found that incentives positively influenced participation rates, and had some effect on smoking reduction. No study, however, showed that incentives and/or competition enhanced smoking cessation past 6 months.	A systematic review identified 15 evaluations of smoking cessation programmes that had a quasi-experimental or experimental design and were published between 1966 and 1992. Only 8 of these 15 studies had an appropriate comparison group that allowed separation of the effects of incentives and competitions from other programme elements. Only 1 study separated the effects of competition from incentives with competition. Consequently, the evidence from these studies is weak.
Fisher KJ, Glasgow RE, Terborg JR. Worksite smoking cessation: A meta-analysis of long-term quit rates from controlled studies. Journal of Occupational Medicine 1990;32(5):429-39.	A systematic review of 20 controlled studies of work site smoking cessation interventions found a modest but significant overall effect. Interventions conducted in smaller work sites, which lasted 2-6 hours, and which contained heavy smokers, were associated with the largest effect sizes. Quit rates were also associated with these factors plus programmes that included a cessation group, were not overly complicated, and that shared company and employee time.	A systematic review of 20 controlled studies of work site smoking cessation interventions yielding a total of 34 comparisons of long-term (average = 12 months) quit rate. An overall mean effect size of .21 +/- .07 (p<.01) was found. The weighted average follow up quit rate from all interventions was 13%.

EDUCATION: Food safety

<i>CITATION</i>	<i>REVIEW DETAILS</i>	<i>FINDINGS</i>
Campbell ME, Gardner CE, Dwyer JJ, Isaacs SM, Krueger PD, Ying JY. Effectiveness of public health interventions in food safety: a systematic review. Canadian Journal of Public Health 1988;89(3):197-202.	A systematic review of the effectiveness of public health interventions regarding food safety at restaurants, institutions, homes and other community based settings found that routine inspection (at least once per year) of food service premises is effective in reducing the risk of food borne illnesses. Food handler training can improve the knowledge and practices of food handlers. Selected community based education programmes can increase public knowledge of food safety. There is some evidence for the effectiveness of multiple public health interventions on food safety.	A systematic review of published and unpublished studies using comprehensive literature searches and screening for relevance and quality of studies identified. 15 primary studies were included in this review and were grouped into three categories: inspections, food handler training, and community based education.