NICE National Institute for Health and Care Excellence

NICE guideline

Alcohol: school-based interventions

Public health guideline

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Your responsibility

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or service users. The application of the recommendations in this guideline are not mandatory and the guideline does not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Local commissioners and/or providers have a responsibility to enable the guideline to be applied when individual health professionals and their patients or service users wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with compliance with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Contents

This guideline is the basis of QS83.

Introduction

The Department of Health (DH) asked the National Institute for Health and Clinical Excellence (NICE or the Institute) to produce public health guidance for use in primary and secondary schools on sensible alcohol consumption.

The guidance also covers pupil referral units, secure training units, local authority secure units and further education colleges.

It is for teachers, school governors and practitioners with health and wellbeing as part of their remit, working in education, local authorities, the NHS and the wider public, voluntary and community sectors. It may also be of interest to children and young people, their families and other members of the public.

The Public Health Interventions Advisory Committee (PHIAC) has considered a review of the evidence, an economic appraisal, stakeholder comments and the results of fieldwork in developing these recommendations. Details of PHIAC membership are given in appendix A. The methods used to develop the guidance are summarised in appendix B. Supporting documents used in the preparation of this document are listed in appendix E. Full details of the evidence collated, including fieldwork data and stakeholder comments, are available on the NICE website, along with a list of the stakeholders involved and the Institute's supporting process and methods manuals.

1 Recommendations

This document constitutes the Institute's formal guidance on interventions in schools to prevent and reduce alcohol use among children and young people. It also looks at how to link these interventions with community initiatives, including those run by children's services.

The evidence statements that underpin the recommendations are listed in appendix C.

There are no national guidelines on what constitutes safe and sensible alcohol consumption for children and young people, so the recommendations focus on: encouraging children not to drink, delaying the age at which young people start drinking and reducing the harm it can cause among those who do drink.

Practitioners will need to use their professional judgement to determine the type of content needed for education programmes aimed at different groups. They will also need to judge whether or not a child or young person is drinking 'harmful amounts of alcohol'.

For the purposes of this guidance, schools include:

- state-sector, special and independent primary and secondary schools
- city technology colleges, academies and grammar schools
- pupil referral units, secure training and local authority secure units
- further education colleges.

School-based education and advice

Recommendation 1

Who is the target population?

Children and young people in schools.

Who should take action?

Head teachers, teachers, school governors and others who work in (or with) schools including: school nurses, counsellors, healthy school leads, personal, social and health education (PSHE)

coordinators in primary schools and personal, social, health and economic (PSHE) education coordinators in secondary schools.

What action should they take?

- Ensure alcohol education is an integral part of the national science, PSHE and PSHE education curricula, in line with Department for Children, Schools and Families (DCSF) guidance.
- Ensure alcohol education is tailored for different age groups and takes different learning needs into account (based, for example, on individual, social and environmental factors). It should aim to encourage children not to drink, delay the age at which young people start drinking and reduce the harm it can cause among those who do drink. Education programmes should:
    - increase knowledge of the potential damage alcohol use can cause – physically, mentally and socially (including the legal consequences)
    - provide the opportunity to explore attitudes to – and perceptions of – alcohol use
    - help develop decision-making, assertiveness, coping and verbal/non-verbal skills
    - help develop self-esteem
    - increase awareness of how the media, advertisements, role models and the views of parents, peers and society can influence alcohol consumption.
- Introduce a 'whole school' approach to alcohol, in line with DCSF guidance. It should involve staff, parents and pupils and cover everything from policy development and the school environment to the professional development of (and support for) staff.
- Where appropriate, offer parents or carers information about where they can get help to develop their parenting skills. (This includes problem-solving and communication skills, and advice on setting boundaries for their children and teaching them how to resist peer pressure.)

Recommendation 2

Who is the target population?

Children and young people in schools who are thought to be drinking harmful amounts of alcohol.

Who should take action?

Teachers, school nurses and school counsellors.

What action should they take?

- Where appropriate, offer brief, one-to-one advice on the harmful effects of alcohol use, how to reduce the risks and where to find sources of support. Offer a follow-up consultation or make a referral to external services, where necessary.
- Where appropriate, make a direct referral to external services (without providing one-to-one advice).
- Follow best practice on child protection, consent and confidentiality. Where appropriate, involve parents or carers in the consultation and any referral to external services.

Partnerships

Recommendation 3

Who is the target population?

Children and young people in schools.

Who should take action?

- Head teachers, school governors, healthy school leads and school nurses.
- Extended school services, children's services (including the Children's Trust/children and young people's strategic partnership), primary care trusts (PCTs), drug and alcohol action teams, crime disorder reduction partnerships, youth services, drug and alcohol services, the police and organisations in the voluntary and community sectors.

What action should they take?

Maintain and develop partnerships to:

- support alcohol education in schools as part of the national science, PSHE and PSHE education curricula
- ensure school interventions on alcohol use are integrated with community activities introduced as part of the 'Children and young people's plan'
- find ways to consult with families (parents or carers, children and young people) about initiatives to reduce alcohol use and to involve them in those initiatives

- monitor and evaluate partnership working and incorporate good practice into planning.

2 Public health need and practice

Alcohol use among children and young people is growing faster than the use of any other drug in the UK and it causes the most widespread problems. Alcohol is also the least regulated and most heavily marketed drug (Advisory Council on the Misuse of Drugs 2006).

The number of children and young people aged 11–15 who drink alcohol has fallen since 2001. However, those who do drink alcohol consume more – and more often (HM Government 2007). In 2006, 21% of those aged 11–15 who had drunk alcohol in the previous week consumed an average 11.4 units – up from 5.3 units in 1990. Drinking prevalence increased with age: 3% of pupils aged 11 had drunk alcohol in the previous week compared with 41% of those aged 15 (The Information Centre for Health and Social Care 2007).

Children and young people aged 11–15 who regularly smoke or drink are much more likely than non-smokers and non-drinkers to use other drugs (Advisory Council on the Misuse of Drugs 2006).

In 2003 in the UK, 8% of young people aged 15–16 reported having unprotected sex after drinking alcohol (11% females, 6% males). Eleven per cent of all those in this age group who had (unprotected or protected) sex as a result of drinking alcohol subsequently regretted it (12% females, 9% males) (Hibbell et al. 2004).

In 2000 in Britain, nearly 14% of young people aged 16–19 were estimated to be either mildly (12.4%) or moderately (1.4%) dependent on alcohol, that is, they scored more than 4 on the 'Severity of alcohol dependence questionnaire' (SAD–Q) (Singleton et al. 2000).

An analysis of data from the 1970 British birth cohort study (Viner and Taylor 2007) found that 17% of adolescent binge drinkers were dependent on alcohol at age 30 (compared to 11% of the remaining cohort); 43% exceeded the recommended weekly limits (compared to 30% of the remaining cohort); 24% were taking illicit drugs (compared to 16% of the remaining cohort).

Regular, heavy alcohol consumption and binge drinking are associated with physical health problems, anti-social behaviour, violence, accidents, suicide, injuries and road traffic accidents. Alcohol consumption can also have an impact on school performance and crime rates (British Medical Association 2007).

Excessive alcohol consumption among adults is associated with 15,000 to 22,000 premature deaths annually. In 2005, 4160 people in England and Wales died from alcoholic liver disease (HM Government 2007).

The risk of liver disease and conditions such as high blood pressure, coronary heart disease and stroke are significantly higher for adults who exceed the recommended limits on alcohol consumption (HM Government 2007).

In 2005–06, over 2500 children aged 0–14 years were admitted to hospital in England with a primary, alcohol-related diagnosis (The Information Centre for Health and Social Care 2006).

Factors that may influence alcohol use among children and young people

One or more of the following factors are common among children and young people who use drugs of any sort, including alcohol:

- Drug or alcohol misuse by parents or older siblings.
- Family conflict or poor and inconsistent parenting.
- Poor school attendance and poor educational attainment.
- Pre-existing behavioural problems.
- Living with a single or step-parent, being looked after or homeless.

(Adapted from Institute of Alcohol Studies factsheet 2007.)

Policy background

Numerous government strategies and policies aim to prevent or reduce alcohol use among children and young people under 18 (see below).

- The 'Alcohol harm-reduction strategy for England' (Prime Minister's Strategy Unit 2004) and its update (HM Government 2007) say that schools should provide alcohol education as part of their citizenship, PSHE and PSHE education programmes. It is acknowledged that information-giving alone is unlikely to reduce consumption and interactive programmes are encouraged to develop the individual's personal skills.
- 'Drugs guidance for schools' (Department for Education and Skills 2004) states that drugs education is part of the statutory national science curriculum and should start in primary school. It also recommends that drugs education should be delivered in PSHE, PSHE education and citizenship classes.

- Alcohol education is an integral part of PSHE and PSHE education which, in turn, is a core part of the National Healthy Schools Programme. The National Healthy Schools Programme adopts a 'whole school' approach to physical and emotional wellbeing ('National healthy school status – a guide for schools' [Department for Education and Skills 2005]).
- 'The drugs strategy' (Home Office 2002) recognises the important role that schools can play in preventing and reducing drug use and its related harms.
- 'Choosing health: making healthier choices easier' (DH 2004a) stresses the need to raise awareness of the health risks associated with alcohol.
- 'The national service framework for children, young people and maternity services. Core standards' (DH 2004b) states that all agencies should identify children and young people at risk of misusing drugs or alcohol and provide them with prevention and treatment services.
- Local authority children's services, health bodies (including PCTs), schools, the police and other agencies are expected to develop and deliver the 'Children and young people's plan' by defining how the five outcomes from 'Every child matters' will be met. This is part of their statutory obligation to cooperate to improve the wellbeing of children in their area (HM Government 2004a; 2004b).
- 'Every child matters: change for children. Young people and drugs' (HM Government 2005) sets out how local authorities should prevent and reduce drug use among children and young people. Average alcohol consumption among children and young people is identified as a DH outcome indicator in 'Every child matters: change for children' (HM Government 2004b)
- The number of young people misusing substances (including alcohol) is one of the new set of national indicators that will be used to monitor the performance of local authorities and their partners. This follows publication of the 2007 comprehensive spending review (HM Treasury 2007) and 'The new performance framework for local authorities and local authority partnerships' (Department for Communities and Local Government 2007). From April 2008, local authorities will be required to negotiate local area agreements (LAAs) comprising up to 35 targets (plus statutory targets for early years and educational attainment) derived from this set of indicators. (They will also be free to agree local targets reflecting important local concerns.)

3 Considerations

PHIAC took account of a number of factors and issues in making the recommendations.

General issues

3.1 Under UK law, children and young people can consume different types of alcohol in different contexts, depending on their age. For instance, young people aged 16 or 17 may consume beer, cider or wine with a meal when under adult supervision on licensed premises. In all other circumstances, it is illegal for anyone under 18 to 'knowingly' consume alcohol on licensed premises, or to buy or attempt to buy alcohol. It is important that schools take this legal framework into account when planning and delivering alcohol education and when developing partnerships to tackle alcohol issues (within and outside schools).

3.2 Different countries favour different approaches to alcohol education. For example, alcohol use is considered normal for a large proportion of the population in the UK where a 'harm reduction' approach is favoured for young people. By contrast in the US, where most of the research on school-based interventions comes from, abstinence is encouraged among children and young people.

3.3 The renewed national alcohol strategy suggests that, 'more needs to be done to promote sensible drinking'. Sensible drinking for adults is described as 'drinking in a way that is unlikely to cause yourself or others significant risk of harm' (HM Government 2007).

3.4 There is no consensus about what constitutes safe and sensible levels of drinking for children and young people. In 2008, the government plans to provide guidance about 'what is and what is not safe and sensible in the light of the latest available evidence from the UK and abroad' (HM Government 2007). PHIAC did not, therefore, consider it part of its remit to define these levels.

3.5 In the absence of guidance on safe and sensible levels of alcohol consumption, PHIAC focused on encouraging children not to drink, delaying the age at which young people start drinking and reducing the harm it can cause among those who do drink. The second recommendation acknowledges that some young people may already be drinking harmful amounts of alcohol.

3.6 A number of social, cultural and economic factors have an influence on alcohol consumption among children, young people and parents. These include peer pressure, the alcohol industry, the media, and the availability and cost of alcohol.

Education

3.7 While schools have an important role to play in combating harmful drinking, PHIAC acknowledged that they are limited in terms of what they can achieve (see 3.6 above).

3.8 The recommendations for schools are in line with existing guidance from the DCSF (Department for Education and Skills 2004). They support the National Healthy Schools Programme's 'whole school' approach (Department for Education and Skills 2005). They also support standards one, four, five (DH 2004b) and nine of the 'National service framework for children, young people and maternity services' (DH 2004c).

3.9 The recommendations support implementation of 'Every child matters: change for children' (HM Government 2004b). This outlines a common assessment framework (CAF) or process to help professionals identify children and young people with specific needs (including those who are misusing alcohol). When a child or young person requires support, 'Every child matters: change for children' recommends that these services should be coordinated by a lead professional.

3.10 The new PSHE and PSHE education curricula, which are being introduced from September 2008, move away from an emphasis on content and instead promote concepts such as 'healthy lifestyles'. They should be tailored to meet individual needs. Alcohol education involves promoting a healthy lifestyle as excessive alcohol use is linked to a range of health and social problems (see section 2).

3.11 PHIAC acknowledged that alcohol use is the cultural norm among most adults in the UK. Some people believe it is normal and acceptable for young people under 18 to drink. Some individuals and groups find alcohol use among any age group unacceptable. It is important to take individual, social, cultural, economic and religious factors into account when delivering alcohol education programmes.

3.12 While some individuals may be more vulnerable than others (see section 2), it is inappropriate only to focus on those individuals. Children and young people from all backgrounds – and in all types of school – may drink harmful amounts of alcohol.

3.13 Those delivering alcohol education programmes need to have the trust and respect of the children and young people involved. They should have received validated training and be able to provide accurate information using appropriate techniques.

3.14 Work with children and young people who use alcohol may lead to confidentiality issues. Where a child or young person requires individual guidance and support, best practice guidelines on consent and confidentiality should be followed (DH 2001). Children and young people should be encouraged to involve their parents or carers and the best interests of the child or young person should be the primary concern. This is in line with the duty to safeguard and promote the welfare of pupils, imposed on all schools and colleges of further education under the Education Act 2002 and Children Act 1989 (HM Government 2006).

Evidence

3.15 The evidence on school-based interventions was not extensive and, as most of it was US-based, it has to be applied with caution. Common shortcomings include:

- non-validated surrogate outcome measures that are not relevant to English policy
- uncertainty whether studies were large enough to detect differences between groups
- inappropriate analyses for the study design used
- analyses which did not take baseline imbalances into account
- high attrition rates.

Nevertheless, PHIAC considered that some evidence was of sufficient quality and sufficiently applicable to England to inform the recommendations.

3.16 Due to the limitations of the evidence, it was not possible to determine the differential effectiveness of the interventions in relation to disadvantaged and

minority groups. In addition, it was not possible to determine what impact the recommendations may have on health inequalities.

3.17 As alcohol use is a sensitive issue associated with social values, self-reported data may be biased.

3.18 The economic analysis carried out to determine whether or not an intervention was cost effective in the long term was subject to uncertainties.

3.19 A number of studies evaluated the input of external contributors to school alcohol education programmes. However, there was a lack of evidence about which type of contribution worked best. The literature focused mainly on 'stand-alone' interventions (rather than those contributing to teacher-led programmes, or giving advice and support to schools). In addition, these studies had limited cultural relevance for England. As a result, PHIAC was unable to make any recommendations about the use of external contributors in schools.

3.20 The recommended interventions were not compared with other types of intervention because it was beyond the remit of this guidance to make such a comparison. (Examples of other types of intervention aimed at preventing or reducing alcohol use include targeted and indicated activities and those taking place outside educational establishments.)

3.21 Forthcoming NICE guidance on PSHE and PSHE education, with reference to sexual health behaviour and alcohol (due September 2009) may lead to additional recommendations on this topic.

4 Implementation

NICE guidance can help:

- NHS organisations meet DH standards for public health as set out in the seventh domain of 'Standards for better health' (updated in 2006). Performance against these standards is assessed by the Healthcare Commission, and forms part of the annual health check score awarded to local healthcare organisations.
- Local authorities (including social care and children's services) and NHS organisations meet the requirements of the government's 'National standards, local action, health and social care standards and planning framework 2005–2008'.
- Provide a focus for children's trusts, health and wellbeing partnerships and other multi-sector partnerships working on health within a local strategic partnership.
- Support schools aiming for healthy school status.
- National and local organisations within the public sector meet government indicators and targets to improve health and reduce health inequalities.
- Local authorities fulfill their remit to promote the economic, social and environmental wellbeing of communities.
- Local NHS organisations, local authorities and other local public sector partners benefit from any identified cost savings, disinvestment opportunities or opportunities for re-directing resources.

NICE has developed tools to help organisations implement this guidance. For details, see our website.

5 Recommendations for research

PHIAC recommends that the following research questions should be addressed in order to improve the evidence relating to interventions in schools to prevent and reduce alcohol use among children and young people.

- In relation to universal interventions delivered in English schools to prevent and reduce alcohol use among children and young people:
    - How does effectiveness and cost effectiveness vary according to: the setting (for example, state sector schools, pupil referral units, further education colleges); who delivers the intervention (for example, teachers, peers); the target group (for example, in terms of age, gender, and those who engage in risky behaviour).
    - What is the best way to ensure universal alcohol interventions do not lead to some children and young people increasing their intake of alcohol?
    - How do the following factors influence effectiveness and cost effectiveness: method of delivery (for example, session format, learning materials); content; frequency and duration of follow-ups; and parental/carer involvement?
- How does effectiveness and cost effectiveness vary according to whether an intervention is delivered alone or as part of a wider substance misuse intervention?
- What are the most effective and cost effective ways of identifying children and young people in schools who are at significant risk from drinking harmful amounts of alcohol?
- What is the best way to ensure universal alcohol interventions carried out in schools meet the needs of children and young people who are disadvantaged or from a minority group?
- What is the incidence, prevalence and consequence of:
    - short-term health and non-health-related outcomes resulting from alcohol use in childhood and adolescence (for example, absence from school, violence)?
    - attributable long-term health and non-health outcomes (for example, poor academic achievement, convictions, violence, adult socioeconomic status)?

6 Updating the recommendations

NICE public health guidance is updated as needed so that recommendations take into account important new information. We check for new evidence 2 and 4 years after publication, to decide whether all or part of the guidance should be updated. If important new evidence is published at other times, we may decide to update some recommendations at that time.

7 Related NICE guidance

Published

Community-based interventions to reduce substance misuse among vulnerable and disadvantaged children and young people. NICE public health guidance 4 (2007).

Social and emotional wellbeing in primary education. NICE public health guidance 12 (2008).

Prevent the uptake of smoking by children and young people. NICE public health guidance 14 (2008).

Social and emotional wellbeing in secondary education. NICE public health guidance 20 (2009).

Alcohol use disorders: preventing harmful drinking. NICE public health guidance 24 (2009).

Alcohol-use disorders: diagnosis, assessment and management of harmful drinking and alcohol dependence. NICE clinical guideline 115 (2011).

Under development

School, college and community-based personal, social and health education, focusing on sexual health and alcohol. NICE public health guidance [Suspended].

8 References

Advisory Council on the Misuse of Drugs (2006) Pathways to problems: hazardous use of tobacco, alcohol and other drugs by young people in the UK and its implications for policy. London: Advisory Council on the Misuse of Drugs.

British Medical Association (2007) Alcohol misuse.

Department for Communities and Local Government (2007) The new performance framework for local authorities and local authority partnerships: single set of national indicators. London: Department for Communities and Local Government.

Department for Education and Skills (2004) Drugs guidance for schools. London: Department for Education and Skills.

Department for Education and Skills (2005) National healthy school status – a guide for schools. London: Department of Health.

Department of Health (2001) Seeking consent: working with children. London: Department of Health.

Department of Health (2004a) Choosing health: making healthier choices easier. London: Department of Health.

Department of Health (2004b) National service framework for children, young people and maternity services. Core standards. London: Department of Health.

Department of Health (2004c) National service framework for children, young people and maternity services. The mental health and psychological well-being of children and young people. London: Department of Health.

Hibbell B, Andersson B, Bjarnason T et al. (2004) The ESPAD report 2003: alcohol and other drug use among students in 35 European countries. Stockholm: The Swedish Council for Information on Alcohol and Other Drugs.

HM Government (2004a) The children act 2004. London: The Stationery Office.

HM Government (2004b) Every child matters: change for children. London: Department for Education and Skills.

HM Government (2005) Every child matters: change for children. Young people and drugs. London: Department for Education and Skills.

HM Government (2006) Working together to safeguard children. A guide to inter-agency working to safeguard and promote the welfare of children. London: The Stationery Office.

HM Government (2007) Safe. Sensible. Social. The next steps in the national alcohol strategy. London: Department of Health.

HM Treasury (2007) Meeting the aspirations of the British people: 2007 pre-budget report and comprehensive spending review. Annex C public service agreements. London: The Stationery Office.

Home Office (2002) Updated drug strategy 2002. London: Home Office.

Institute of Alcohol Studies (2007) Adolescents and alcohol – factsheet.

Prime Minister's Strategy Unit (2004) Alcohol harm-reduction strategy for England. London: Prime Minister's Strategy Unit.

Singleton N, Bumpstead R, O'Brien M et al. (2000) Psychiatric morbidity among adults living in private households. London: The Stationery Office.

The Information Centre for Health and Social Care (2006) Hospital episode statistics.

The Information Centre for Health and Social Care (2007) Smoking, drinking and drug use among young people in England in 2006: headline figures. London: The Information Centre for Health and Social Care.

Viner RM, Taylor B (2007) Adult outcomes of binge drinking in adolescence: findings from a UK national birth cohort. Journal of Epidemiology and Community Health 61: 902–907.

Appendix A: membership of the Public Health Interventions Advisory Committee (PHIAC), the NICE Project Team and external contractors

Public Health Interventions Advisory Committee (PHIAC)

NICE has set up a standing committee, the Public Health Interventions Advisory Committee (PHIAC), which reviews the evidence and develops recommendations on public health interventions. Membership of PHIAC is multi-disciplinary, comprising public health practitioners, clinicians (both specialists and generalists), local authority employees, representatives of the public, patients and/or carers, academics and technical experts, as follows.

Professor Sue Atkinson CBE Independent Consultant and Visiting Professor in the Department of Epidemiology and Public Health, University College London

Mr John Barker Associate Foundation Stage Regional Adviser for the Parents as Partners in Early Learning Project, DfES National Strategies

Professor Michael Bury Emeritus Professor of Sociology, University of London and Honorary Professor of Sociology, University of Kent

Professor Simon Capewell Chair of Clinical Epidemiology, University of Liverpool

Professor K K Cheng Professor of Epidemiology, University of Birmingham

Ms Joanne Cooke Director, Trent Research and Development Support Unit (RDSU), University of Sheffield

Dr Richard Cookson Senior Lecturer, Department of Social Policy and Social Work, University of York

Mr Philip Cutler Forums Support Manager, Bradford Alliance on Community Care

Professor Brian Ferguson Director of the Yorkshire and Humber Public Health Observatory

Mr Howard Gilfillan Former Head Teacher, Branksome Comprehensive School, Darlington

Professor Ruth Hall Regional Director, Health Protection Agency, South West

Mr Alasdair Hogarth Head Teacher, Archbishops School, Canterbury

Ms Amanda Hoey Director, Consumer Health Consulting Limited

Mr Andrew Hopkin Assistant Director, Local Environment, Derby City Council

Dr Ann Hoskins Deputy Regional Director of Public Health, NHS North West

Ms Muriel James Secretary for the Northampton Healthy Communities Collaborative and the King Edward Road Surgery Patient Participation Group

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Ms Valerie King Designated Nurse for Looked After Children for Northampton PCT, Daventry and South Northants PCT and Northampton General Hospital. Public Health Skills Development Nurse, Northampton PCT

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Professor Susan Michie Professor of Health Psychology, BPS Centre for Outcomes Research & Effectiveness, University College London

Dr Mike Owen General Practitioner, William Budd Health Centre, Bristol

Ms Jane Putsey Lay Representative. Chair of Trustees of the Breastfeeding Network

Dr Mike Rayner Director of British Heart Foundation Health Promotion Research Group, Department of Public Health, University of Oxford

Mr Dale Robinson Chief Environmental Health Officer, South Cambridgeshire District Council

Ms Joyce Rothschild School Improvement Adviser, Solihull Local Authority

Dr Tracey Sach Senior Lecturer in Health Economics, University of East Anglia

Professor Mark Sculpher Professor of Health Economics, Centre for Economics (CHE), University of York

Dr David Sloan Retired Director of Public Health

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Ms Sarah Smart Development Manager, PSHE Subject Association

Expert testimony to PHIAC:

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Mr Andrew McNeill Director, Institute of Alcohol Studies

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External contractors

External reviewers

The National Collaborating Centre for Drug Prevention (NCCDP) at Liverpool John Moores University (LJMU) carried out the effectiveness review. The authors were: Lisa Jones, Tom Jefferson, Clare Lushey, Michela Morleo, Harry Sumnall, Karl Witty and Mark Bellis.

The Centre for Health Planning and Management at the University of Keele carried out the economic appraisal. The authors were: Marilyn James and Elizabeth Stokes.

Both reports were amalgamated into one document.

Fieldwork

The fieldwork was carried out by the NCCDP at LJMU, in conjunction with HIT, a Merseyside-based training and health promotion organisation.

Appendix B: summary of the methods used to develop this guidance

Introduction

The report of the review and economic appraisal includes full details of the methods used to select the evidence (including search strategies), assess its quality and summarise it.

The minutes of the PHIAC meetings provide further detail about the Committee's interpretation of the evidence and development of the recommendations.

All supporting documents are listed in appendix E and are available from the NICE website.

The guidance development process

The stages of the guidance development process are outlined in the box below.

1. Draft scope
2. Stakeholder meeting
3. Stakeholder comments
4. Final scope and responses published on website
5. Reviews and cost-effectiveness modelling
6. Synopsis report of the evidence (executive summaries and evidence tables) circulated to stakeholders for comment
7. Comments and additional material submitted by stakeholders
8. Review of additional material submitted by stakeholders (screened against inclusion criteria used in reviews)
9. Synopsis, full reviews, supplementary reviews and economic modelling submitted to PHIAC
10. PHIAC produces draft recommendations
11. Draft recommendations published on website for comment by stakeholders and for field testing
12. PHIAC amends recommendations
13. Responses to comments published on website
14. Final guidance published on website

Key questions

The key questions were established as part of the scope. They formed the starting point for the review of evidence and facilitated the development of recommendations by PHIAC. The overarching question was:

What are the most effective and cost-effective school-based interventions to prevent or reduce alcohol use among pupils?

The following subsidiary questions were considered:

- What type of content works best (for example, should it focus on the harmful effects to health, legal issues or the social consequences of alcohol use)?
- Is it better for the intervention to be delivered by a generalist, a specialist or someone else (for example, the police, a peer or a drug worker)?
- What are the most cost-effective and appropriate interventions for different groups of young people (for example, males and females, different age groups, different social classes and different ethnic groups)?
- Does the intervention lead to any adverse or unintended effects (for example, an increase in alcohol consumption)?
- What factors might inhibit or facilitate implementation (for example, parents' views)?

Reviewing the evidence of effectiveness

One review of effectiveness was conducted.

Identifying the evidence

The following databases were searched for systematic reviews, randomised controlled trials (RCTs), non-RCTs, and controlled before and after studies published since 1990:

- ASSIA (Applied Social Science Index and Abstracts)
- CINAHL
- Cochrane Library (CDSR, DARE, HTA and CCTR)

- EMBASE
- EPPI-Centre databases
- ERIC
- ETOH
- Health Management Information Consortium
- MEDLINE
- National Guidelines Clearing House
- National Research Register
- Project Cork
- PsycINFO
- SIGLE
- SOMED
- SPECTR (Campbell Collaboration Trials Registry)
- Web of Science (Science and Social Sciences citation indexes).

The following websites were searched:

- Alcohol and Education Research Council
- Alcohol Concern
- Department for Education and Skills
- Department of Health
- Drugscope.

In addition, information on current practice in English schools at a local and regional level was sought via Healthy Schools and DAAT coordinators. Further details of the search terms and strategies are included in the review report.

Selection criteria

Studies were included if they:

- involved children and young people under 18 years old
- were undertaken in primary and secondary state-sector maintained schools, city technology colleges, academies, grammar, non-maintained special and independent schools or pupil referral, secure training and local authority secure units, or further education settings
- examined interventions in schools which aimed to prevent or reduce alcohol use, including:
    - lessons delivered by teachers or other professionals as part of a classroom-based curriculum
    - peer-led education by other pupils
    - external contributions (for example, from the police, theatre in education (TIE) organisations and life education centres)
    - implementation of school policies
    - activities carried out as part of the informal curriculum (for example, learning experiences in assembly/collective worship and parent evenings)
- compared the intervention with a control or with another approach
- reported changes in alcohol-related behaviour, including:
    - percentage who reported drinking alcohol (lifetime, monthly or weekly use)
    - amount of drinking and its frequency
    - age at which children/young people first drank alcohol
    - unsupervised alcohol use.

Studies were excluded if they examined interventions:

- aimed at children and young people who did not attend any of the types of schools listed above, for example, those in secure institutions or receiving home education
- without a school-based component, including:

- 'server' and 'responsible beverage service' (RBS) training, media campaigns and diversionary activities delivered in the wider community
- regulatory schemes such as taxation, restrictions on alcohol sales and advertising, proof of age schemes and warning labels
- drink-driving schemes and driver training
- treatment of alcohol misuse or alcohol dependence, including psychosocial interventions.

Quality appraisal

Included papers were assessed for methodological rigour and quality using the NICE methodology checklist, as set out in the NICE technical manual 'Methods for development of NICE public health guidance' (see appendix E). Each study was described by study type and graded (++, +, -) to reflect the risk of potential bias arising from its design and execution.

Study type

- Meta-analyses, systematic reviews of randomised controlled trials (RCTs) or RCTs (including cluster RCTs).
- Systematic reviews of, or individual controlled non-randomised trials (CNRT), case-control studies, cohort studies, controlled before-and-after (CBA) studies, interrupted time series (ITS) studies, correlation studies.
- Non-analytical studies (for example, case reports and case series).
- Expert opinion, formal consensus.

Study quality

++ All or most criteria have been fulfilled. Where they have not been fulfilled the conclusions are thought very unlikely to alter.

+ Some criteria fulfilled. Those criteria that have not been fulfilled or not adequately described are thought unlikely to alter the conclusions.

- Few or no criteria fulfilled. The conclusions of the study are thought likely or very likely to alter.

The main reasons for studies being assessed as (-) were:

- limited reporting of methodological details such as methods of random assignment
- high level of participant attrition
- lack of detail about baseline equivalence of intervention and control groups.

The interventions were also assessed for their applicability to the UK and the evidence statements were graded as follows:

A. harm-reduction approach and likely to be applicable across a broad range of settings and populations

B. harm-reduction approach and likely to be applicable across a broad range of settings and populations, assuming they are appropriately adapted

C. harm-reduction approach but applicable only to settings or populations included in the studies – broader applicability is uncertain, or approach unclear

D. clear abstinence approach or applicable only to settings or populations included in the studies.

Summarising the evidence and making evidence statements

The review data was summarised in evidence tables (see full review).

The findings from the studies were synthesised and used as the basis for a number of evidence statements relating to each key question. The evidence statements reflect the strength (quantity, type and quality) of evidence and its applicability to the populations and settings in the scope.

Economic appraisal

The economic appraisal consisted of a review of economic evaluations and a cost-effectiveness analysis.

Review of economic evaluations

The following databases were searched:

- EconLit

- Health Economic Evaluation Database (HEED)
- NHS Economic Evaluation Database (NHS EED).

The inclusion and exclusion criteria were the same as those used for the effectiveness review. 'Cost per case averted' was chosen as the primary measure of cost and effect.

Cost-effectiveness analysis

The primary outcome produced by the economic analysis was the cost per case of averting hazardous/harmful drinking. An additional analysis was undertaken to estimate the quality of life years (QALY) gained before reaching a £20,000 or £30,000 per QALY threshold. A cost-consequence analysis was also carried out on non-health related outcomes.

An economic model was constructed to incorporate data from the reviews of effectiveness and cost effectiveness. The results are available on the NICE website.

Fieldwork

Fieldwork was carried out to evaluate the relevance and usefulness of NICE guidance for practitioners and the feasibility of implementation. It was conducted with practitioners and commissioners who are involved in providing alcohol education and advice to children and young people in schools. They included those working in the NHS, education, local authorities, the criminal justice sector and the wider public, voluntary and community sectors.

The fieldwork comprised:

- Three meetings carried out in Liverpool, Manchester and Bristol with practitioners and commissioners working in education, health and the criminal justice sectors.
- Twenty two semi-structured telephone interviews with professionals working in education, the NHS, children, young people and families' services, criminal justice and the voluntary and community sectors.

The main issues arising from the fieldwork are set out in appendix C under fieldwork findings. The full fieldwork report is available on the NICE website.

How PHIAC formulated the recommendations

At its meeting in May 2007 PHIAC considered the evidence of effectiveness and cost effectiveness to determine:

- whether there was sufficient evidence (in terms of quantity, quality and applicability) to form a judgement
- whether, on balance, the evidence demonstrates that the intervention is effective or ineffective, or whether it is equivocal
- where there is an effect, the typical size of effect.

PHIAC developed draft recommendations through informal consensus, based on the following criteria.

- Strength (quality and quantity) of the evidence of effectiveness and its applicability to the populations/settings referred to in the scope.
- Effect size and potential impact on population health and/or reducing inequalities in health.
- Cost effectiveness (for the NHS and other public sector organisations).
- Balance of risks and benefits.
- Ease of implementation and the anticipated extent of change in practice that would be required.

Where possible, recommendations were linked to an evidence statement(s) (see appendix C for details). Where a recommendation was inferred from the evidence, this was indicated by the reference 'IDE' (inference derived from the evidence).

The draft guidance, including the recommendations, was released for consultation in July 2007. At its meeting in September 2007, the PDG considered comments from stakeholders and the results from fieldwork, and amended the guidance. The guidance was signed off by the NICE Guidance Executive in October 2007.

Appendix C: the evidence

This appendix sets out the relevant evidence statements taken from the review (see appendix B for the key to study types and quality assessments) and links them to the relevant recommendations. The evidence statements are presented here without references – these can be found in the full review (see appendix E for details). It also sets out a brief summary of findings from the economic appraisal.

The combined review and economic appraisal are available on the NICE website. Where a recommendation is not taken directly from the evidence statements, but is inferred from the evidence, this is indicated by IDE (inference derived from the evidence).

Recommendation 1: evidence statements 1, 2, 3c, 5.

Recommendation 2: evidence statements 4a, 5.

Recommendation 3: IDE.

Evidence statements

Evidence statement 1

There is evidence from a high-quality systematic review (++) that three programmes: Strengthening Families, Botvin's life skills training (LST) and a culturally focused curriculum for Native American students, can produce long-term reductions (greater than 3 years) in alcohol use.

Evidence statement 2

There is evidence from two classroom-based, teacher-led programmes that targeted children between the ages of 12 and 13 years, to suggest that interventions using the life skills approach (three RCTs [+]) or focusing on harm reduction through skills-based activities (School Health and Alcohol Harm Reduction Project [SHAHRP]) (one CNRT [+]) can produce medium- to long-term reductions in alcohol use and, in particular, risky drinking behaviours such as drunkenness and binge drinking. However, the applicability and transferability of these programmes requires further study.

Evidence statement 3c

There is evidence (one RCT [+]) to suggest that a culturally-tailored skills training intervention for Native American students may have long-term effects on alcohol use. However, given the cultural specificity of this programme, it has limited applicability to UK practice and policy.

Evidence statement 4a

There is evidence to suggest that brief intervention programmes that involve nurse-led consultations regarding a young person's alcohol use, such as the STARS for Families programme (two RCTs [++], seven RCTs [+]), that target children aged 12–13, can produce short-, but not medium-term reductions in heavy drinking. However, these types of programme may have limited applicability as they are based on an abstinence approach.

Evidence statement 5

There is evidence to suggest that programmes that begin early in childhood, combine a school-based curriculum intervention with parent education, such as the Seattle Social Development Project (SSDP) (one CNRT [+]) and Linking the Interests of Families and Teachers (LIFT) (one RCT [-]), which target a range of problem behaviours including alcohol use, can have long-term effects on heavy and patterned drinking behaviours. In addition, the Healthy School and Drugs Project (one CNRT [+]), which targeted secondary school students, had short-term effects on alcohol use. However, longer-term effects of the programme have not been examined.

Cost-effectiveness evidence

Overall, school-based alcohol interventions were found to be cost effective, given the fact that they may avert the high costs associated with harmful drinking (both in terms of health and other consequences). However, intensive long-term programmes may not be cost effective.

It should be noted that the economic analysis carried out to determine whether or not an intervention was cost effective was subject to very large uncertainties.

Fieldwork findings

Fieldwork aimed to test the relevance, usefulness and feasibility of implementing the recommendations and the findings were considered by PHIAC in developing the final recommendations. For details, go to the fieldwork section in appendix B and online.

Fieldwork participants were generally positive about the recommendations and their potential to help prevent or reduce alcohol use among children and young people. The recommendations were seen to reinforce aspects of the National Healthy Schools Standard and the Science and PSHE and PSHE education curricula, particularly in relation to Key Stages 3 and 4.

Participants felt that the 'harm reduction' approach adopted was a more realistic option than abstention, although they were clear that young people who decide not to use alcohol should also be respected.

The promotion of community partnerships was acknowledged as critical in ensuring a consistent, comprehensive response to alcohol use across education settings and the community.

The majority of participants said the recommendations were relevant to their roles. They also said that although the interventions being promoted did not offer a new approach, this good practice has not been implemented universally. Wider and more systematic implementation would be achieved if:

- there was a strong network of support staff (such as school nurses)
- schools developed links with local youth substance misuse services
- teachers and support staff were appropriately trained and skilled
- the recommendations were promoted as 'standards' rather than guidance
- the recommendations were implemented as part of wider local or national alcohol strategies

Many participants reported that they would use NICE guidance to help plan new initiatives as it provided information that was not currently included in DCSF or Qualifications and Curriculum Authority (QCA) guidance.

Appendix D: gaps in the evidence

PHIAC identified a number of gaps in the evidence relating to the interventions under examination, based on an assessment of the evidence, stakeholder comments and fieldwork data. These gaps are set out below.

1. There is a lack of well-designed studies on the effectiveness and cost- effectiveness of alcohol education programmes in schools in England (most of the available evidence originates from the US). There is also a lack of research on whether effective US-based programmes can be implemented successfully in the UK. The 'Blueprint' programme is currently being evaluated, but other prevention programmes in England need to be evaluated on an ongoing basis.
2. There have been few economic evaluations of alcohol education and few of those have considered both the costs and consequences of implementing school-based programmes.
3. Many studies had design limitations which potentially affect their validity, in particular, in relation to:
    - the methods used to randomise participants or clusters
    - the way participant numbers were reported at baseline and the way details of attrition were reported
    - the use of non-validated surrogate outcome measures that were not relevant to English policy
    - the lack of power in the studies
    - the analyses used
    - analyses which did not take baseline imbalances into account
    - the use of self-reported data (reports could be biased as alcohol use is a sensitive issue associated with social values).

    In addition, the differential effectiveness of interventions in relation to disadvantaged and minority groups could not be determined.
4. Few studies utilised standardised outcome measures which had been determined a priori; these should include adverse outcomes and measures of harm. Reporting of findings often lacked clarity and detail.

5. There is a lack of data on how alcohol education programmes impact on crime, levels of violence and other consequences of alcohol use.

6. Standardised data on the impact of alcohol use among children and young people is limited (this data should cover, for example, injuries and other health effects, violence and disorder, unintended pregnancies and school attendance). In addition, there is a lack of data on long-term drinking trends among children and young people, and on the long-term health and social impacts (into adulthood).

7. There is a lack of qualitative studies looking at: children and young people's attitudes towards – and views on – alcohol use; the meaning and role of alcohol in their lives; and the role of the alcohol industry.

8. There is a lack of data on the effectiveness of peer-led alcohol education for children and young people.

9. Alcohol education programmes tend to be evaluated in isolation or as part of general substance misuse programmes. There has been little evaluation of alcohol education offered as part of general health education and life skills training.

10. The effectiveness of using the PSHE and PSHE education framework to deliver alcohol education (as part of the National Healthy Schools Programme) needs further evaluation.

11. There is a lack of research into the differential effectiveness of interventions for different groups of children and young people. In particular, there is a lack of research into the impact that interventions can have on those most at risk of alcohol-related harm and in relation to health inequalities.

12. There is a lack of research on how different types of school and the demographic profile of a school affects the uptake, delivery and impact of alcohol education programmes.

13. There is a lack of evidence on what skills and qualities are needed to deliver an effective alcohol education programme in schools.

14. There is a lack of research on the impact of new licensing laws (for instance, all-day opening) on the way children and young people use alcohol.

The Committee made five recommendations for research. These are listed in section 5.

Appendix E: supporting documents

Supporting documents are available from the NICE website. These include the following:

- Review of effectiveness and cost effectiveness – executive summary, main report and evidence tables.
- A quick reference guide for professionals whose remit includes public health and for interested members of the public.

For information on how NICE public health guidance is developed, see:

- 'Methods for development of NICE public health guidance (second edition, 2009)'
- 'The NICE public health guidance development process: An overview for stakeholders including public health practitioners, policy makers and the public (second edition, 2009)'.

Changes after publication

February 2012: minor maintenance.

February 2013: minor maintenance.

About this guidance

NICE public health guidance makes recommendations on the promotion of good health and the prevention of ill health.

This guidance was developed using the NICE public health intervention guidance process.

The recommendations from this guidance have been incorporated into a NICE Pathway. Tools to help you put the guidance into practice and information about the evidence it is based on are also available.

Your responsibility

This guidance represents the views of the Institute and was arrived at after careful consideration of the evidence available. Those working in the NHS, local authorities, the wider public, voluntary and community sectors and the private sector should take it into account when carrying out their professional, managerial or voluntary duties.

Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to avoid unlawful discrimination and to have regard to promoting equality of opportunity. Nothing in this guidance should be interpreted in a way which would be inconsistent with compliance with those duties.

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