

NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

PUBLIC HEALTH DRAFT GUIDANCE

Tobacco: helping people of South Asian origin to stop using smokeless tobacco

Introduction: scope and purpose of this draft guidance

What is this guidance about?

This guidance aims to help people of South Asian origin to stop using smokeless tobacco. The recommendations cover:

- assessing local need
- working with local South Asian communities
- planning and providing services
- providing brief advice and referral: dentists, GPs, pharmacists, and other health professionals
- training for practitioners
- specialist cessation services.

The phrase 'people of South Asian origin' is used in this guidance to mean people with ancestral links to Bangladesh, India, Nepal, Pakistan or Sri Lanka.

'Smokeless tobacco' refers to any type of product containing tobacco that is placed in the mouth or nose and not burned and which is typically used in England by people of South Asian origin. (See appendix F for more detail of these products.)

Who is this guidance for?

The guidance is for providers of smoking and tobacco cessation services, health and social care practitioners and all those with public health as part of their remit. They may be working within the NHS, local authorities or the wider public, private, voluntary and community sectors. Examples include: GPs,

dentists, dental nurses, community pharmacists, nurses, midwives, community and religious leaders, community champions and peer educators, health trainers, health visitors and other health professionals.

The guidance may also be of interest to local authority elected members, retailers and suppliers of smokeless tobacco products, people who want to stop using smokeless tobacco, their families and other members of the public.

Why is this guidance being produced?

The Department of Health (DH) asked the National Institute for Health and Clinical Excellence (NICE) to produce this guidance.

It should be implemented alongside other relevant guidance and regulations (for details see sections 4 and 7 on implementation and related NICE guidance respectively).

How was this guidance developed?

The recommendations are based on the best available evidence. They were developed by the Public Health Interventions Advisory Committee (PHIAC).

Members of PHIAC are listed in appendix A.

The guidance was developed using the NICE public health intervention process. See appendix B for details.

Supporting documents used to prepare this document are listed in appendix E.

What evidence is the guidance based on?

The evidence that PHIAC considered included: reviews of the evidence, economic modelling and the testimony of expert witnesses. Further detail on the evidence is given in the considerations section (section 3) and in appendices B and C.

In some cases, the evidence was insufficient and PHIAC has made recommendations for future research.

Status of this guidance

This is **draft** guidance.

This document does not include all sections that will appear in the final guidance. NICE is now inviting comments from stakeholders (listed on our [website](#)).

Note that this document is not NICE's formal guidance on 'Smokeless tobacco: South Asians'. The recommendations made in section 1 are provisional and may change after consultation with stakeholders and fieldwork.

The stages NICE will follow after consultation (including fieldwork) are summarised below.

- The Committee will meet again to consider the comments, reports and any additional evidence that has been submitted.
- After that meeting, the Committee will produce a second draft of the guidance.
- The draft guidance will be signed off by the NICE Guidance Executive.

For further details, see '[The NICE public health guidance development process: An overview for stakeholders including public health practitioners, policy makers and the public \(second edition, 2009\)](#)'.

The key dates are:

Closing date for comments: 25 April 2012.

Next PHIAC meeting: 18 May 2012. This is the date when fieldwork and stakeholder comments will be discussed.

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1 Draft recommendations

The Public Health Interventions Advisory Committee (PHIAC) considers that the recommended approaches are cost effective.

The evidence statements underpinning the recommendations are listed in appendix C.

The recommendations in this guidance reflect the evidence identified and the discussions of PHIAC. However, no evidence was identified for some approaches and their absence from the recommendations is a result of this lack of evidence. It should not be taken as a judgement on whether they are effective or cost effective.

For the research recommendations and gaps in research, see section 5 and appendix D respectively.

This guidance focuses on cessation, that is, interventions that help people of South Asian origin to stop using smokeless tobacco products. While prevention activities are, strictly speaking, outside its scope, some interventions may also help stop people from taking up the habit in the first place. (For example, they may help young people who are experimenting with tobacco to give it up before it becomes a habit.)

The recommendations have been made within the context of general health service provision for South Asian communities and the specific provision of local tobacco control initiatives. Wider tobacco control measures, for example, legislation, taxation, advertising regulation and the use of health warnings on products, are not covered.

The gender, age, occupation, religious background and country of origin of users within South Asian communities will vary across the country, so the approaches recommended will need to be tailored accordingly.

Smokeless tobacco

In this guidance, smokeless tobacco covers the following types of products (the most well-known are listed first):

- Gutka (also known as Pan Masala, includes tobacco which is sucked or chewed)
- Khaini (sucked or chewed)
- Lal Dant Manjan, Gadakhu, Gul, Mishri, or Creamy Snuff (dental products used as toothpaste or rubbed on gums)
- Nass (used nasally, sucked or chewed)
- Shupari (chewed in a 'Betel Quid')
- Shammah and Maras powder (sucked or chewed)
- Zarda, Qiwam, or Mawa (chewed).

Different products are used in different parts of the country. In addition, the term 'smokeless tobacco' is not always recognised by users. Sometimes they will be unaware that the products they use contain tobacco. So it may be necessary to replace the term 'smokeless tobacco' with the names used locally in the recommendations below. (For example, a specific smokeless tobacco cessation service could be referred to as a 'Gutkha' or 'Paan' cessation service.)

Whose health will benefit from the recommendations?

Members of South Asian communities in England who use smokeless tobacco products. This includes those who are socially isolated from these communities (for example, because they live outside the immediate geographic area where the community is centred or because they rarely leave the home).

People of South Asian origin are the focus of this guidance, as they are the predominant users of smokeless tobacco products in England. However, others who use these products may also benefit from the fact that health professionals will be more aware of how to identify and help them.

Recommendation 1 Assessing local need

Who should take action?

- Directors of public health.
- Managers of tobacco cessation or prevention services.
- Public health commissioners and specialists responsible for local tobacco cessation activities.

What action should they take?

- Work with local South Asian voluntary and community organisations to understand the specific concerns and needs of local South Asian communities in relation to smokeless tobacco (see recommendation 2).
- Collect and analyse local data about South Asian communities, for example, from local South Asian voluntary and community organisations, local dentists, local health services and from routinely collected datasets on:
 - the prevalence and incidence of smokeless tobacco use and the demographics of people who use it, including those who do not use cessation services (for example, their age, ethnicity, gender, language, religion and socioeconomic status)
 - the types of smokeless tobacco used
 - the perceptions among users of the level of health risk associated with these products
 - associated health problems, in particular local rates of cardiovascular disease, oropharyngeal cancers and periodontal disease.
- Use consistent terminology to describe the products, as specified in the [‘Niche tobacco products directory’](#) website. Systematically note any local variation in the terminology used by retailers and consumers for these products.

- Collect any available information from tobacco cessation services (for both smokeless and smoked tobacco) on the number of South Asians who have recently sought help. Depending on the level of detail available, data should be broken down demographically (by age, ethnic suborigin, gender, religion and socioeconomic status).
- Gather information on where, when and how often smokeless tobacco cessation services are promoted and provided – and by whom – to local South Asian communities. Aim to get an overview of the services on offer.

Recommendation 2 Working with local South Asian communities in areas of identified need

Who should take action?

- Directors of public health.
- Local voluntary and community organisations with a remit for tobacco cessation or that work with South Asian communities.
- Managers of tobacco cessation or prevention services.
- Schools.
- Others with a remit for managing tobacco cessation services or with responsibility for the health and wellbeing of South Asian communities.

What action should they take?

- Work with local South Asian communities to plan, design and coordinate activities to help them stop using smokeless tobacco. Develop trust and relationships between relevant organisations, communities and people by involving them in all aspects of the plan. The plan should take account of existing and past activities to address smokeless tobacco and other health issues among these communities. (Also see NICE guidance on [community engagement](#).)

- Work in partnership with those running existing community activities to raise awareness of local smokeless tobacco cessation services and how to access them. Also address any misconceptions about the potential health benefits of using these products.
- Ensure any material on smokeless tobacco cessation:
 - refers to the products using the names people use locally (see recommendation 1)
 - provides information about the risks associated with smokeless tobacco and the availability of services to help people quit
 - dispels any myths and misconceptions about smokeless tobacco (for example, that it is healthy and is an appropriate way to ease indigestion or oral pain, or that it helps freshen the breath)
 - addresses the needs of non-English-speaking South Asian communities, for example, by providing translations
 - provides information specifically targeted at South Asian women living in ethnic subcommunities where their use of smokeless tobacco is known to be high
 - discusses the concept of addiction in a way that is sensitive to culture and religion (for example, it may be better to refer to users as having developed a ‘habit’, rather than being ‘addicted’).
- Take care not to stigmatise users of smokeless tobacco products within their own community when producing cessation material or publicising services. Also take care not to stigmatise South Asians in the eyes of the general community.
- Use venues that members of local South Asian communities frequent to publicise, provide, or consult on cessation services with them (for example, schools and premises where prayer groups or cultural events are held).

- Raise awareness among teachers about smokeless tobacco use and encourage teachers to discuss with their students the reasons why people start to use smokeless tobacco. Support teachers in providing information on the harm smokeless tobacco causes and to dispel any myths (see above).

Recommendation 3 Planning and providing services in areas of identified need

Who should take action?

- Directors of public health.
- Managers of tobacco cessation or prevention services.
- Public health commissioners and specialists responsible for local smoking and smokeless tobacco cessation services.

What action should they take?

- Using the results of local needs assessment (see recommendation 1), commission an appropriate mix and range of local smokeless tobacco cessation services for South Asians. This could include services within existing smoking cessation provision. It could also include:
 - separately branded services (see recommendation 6), including for example, services targeted at South Asian women, speakers of a specific language or those who use a certain type of smokeless tobacco product
 - services offered within a range of healthcare and community settings (for example, GP or dental surgeries, community pharmacies and community centres) (see recommendation 4).
- Provide resources designed to encourage people from South Asian groups to seek help from cessation services and letting them know how to do so.
- Ensure local smokeless tobacco cessation services (and activities to promote them) are coordinated with, or linked to, national stop smoking

services. They should also be combined with other tobacco prevention and cessation activities, as part of a comprehensive local tobacco control strategy.

- Ensure local smokeless tobacco cessation services are part of a wider approach to addressing the range of health needs facing South Asian communities. They should be planned in partnership with relevant local voluntary and community organisations and user groups, and in consultation with local South Asian communities (see recommendation 2). Services should take into account the needs of:
 - people from different local South Asian communities, including gender and language (for example, by using staff with appropriate language skills or translators, or providing translated material)
 - socially isolated people (see recommendation 5) by, for example, providing a home visiting service.
- Regularly monitor and evaluate all local smokeless tobacco cessation services (and activities to promote them) to ensure they are effective and acceptable to service users. Where necessary, adjust services to meet local need more effectively. The following outcomes should be reported:
 - number of quit attempts
 - percentage of successful quit attempts at 4 weeks, 6 months and 12 months
 - percentage with adverse effects
 - any increase in tobacco smoking once people have quit the smokeless variety.

***Recommendation 4 Providing brief advice and referral:
dentists, GPs, pharmacists and other health professionals***

Who should take action?

Practitioners including:

- dentists
- GPs
- other relevant health practitioners (including dental nurses, dental hygienists, community pharmacists, midwives and health visitors).

What action should they take?

- Ask patients about their smokeless tobacco use and record the outcome in their patient notes. Always refer to smokeless tobacco products using the names they are known by locally (see recommendation 1).
- If someone uses smokeless tobacco, ensure they are aware of the potential health risks and advise them to stop, using a brief intervention.
- When it is not possible to deliver a brief intervention, or it does not appear to have worked, refer people who want to quit the habit to tobacco cessation services that use counsellors trained in behavioural support. This includes South Asian-focused services, where they are available.
- Record the person's response to any attempts to encourage or help them to stop using smokeless tobacco in the patient notes.

Recommendation 5 Training for practitioners

Who should take action?

- Health and dental services.
- NHS Centre for Smoking Cessation and Training.

What action should they take?

- Ensure GPs, dentists, dental nurses, dental hygienists, community pharmacists, midwives, health visitors and other health professionals are trained to be aware of smokeless tobacco use. The training should help them to:
 - recognise the signs and symptoms of smokeless tobacco use
 - use the local names for the products (see recommendation 1)

- be aware of, and sensitive to, the cultural issues facing South Asians (for example, they may be less used to preventive health services)
- feel confident in providing information on the harm smokeless tobacco causes and to dispel any myths (for example, that these products are an appropriate way to ease indigestion or oral pain, or that they increase attractiveness or freshen the breath)
- deliver a brief intervention, or refer people who want to quit to cessation services.

Recommendation 6 Specialist cessation services in areas of identified need

Who should take action?

- Providers of primary and secondary healthcare. This includes those working in general practice, dental practices and pharmacies.
- Staff working in community-based cessation services.

What action should they take?

- Consider a range of approaches to help people quit smokeless tobacco, taking into account existing cessation services for both smokeless and smoked tobacco (see recommendation 1).
- Ensure staff working in tobacco cessation are trained to recommend or provide brief advice to people who use smokeless tobacco. Also ensure they refer to smokeless tobacco products using the names they are known by locally (see recommendation 1). In addition, they should be able to advise on how to cope with the potential adverse effects of quitting.
- Following a quit attempt, cessation services should offer help to prevent a relapse. If possible, they should also validate a quit attempt by using

cotinine tests (saliva examination) and monitor for any possible increase in tobacco smoking or use of areca nut.

- Ensure services are tailored for, and targeted at, specific groups who appear to use smokeless tobacco the most, based on local needs assessment (see recommendation 1). For example, it is often particularly prevalent among South Asian women. Note, usage patterns in some areas may require the development of information or services in certain languages.
- Ask the local South Asian community whether it would be acceptable to include tobacco cessation services for them within mainstream services, or whether they would prefer separately 'branded' services.
- Community-based services should use a range of methods to identify socially isolated adults who use smokeless tobacco. These may include, for example, older people or women. They should be offered home outreach services or other support.

2 Public health need and practice

Many people in England of South Asian origin use a number of different types of [smokeless tobacco products](#). Typically, these products also tend to contain other unhealthy ingredients such as areca nuts, slaked lime, flavourings and sweeteners. (Appendix F gives a more detailed breakdown of the different types.)

The products are associated with a number of health problems including:

- nicotine addiction
- mouth and oral cancer
- periodontal disease
- heart attack and stroke
- problems in pregnancy and following childbirth (including foetal anaemia, abnormal placental pathology, stillbirth, young gestational age at birth and low birthweight)
- late diagnosis of dental problems (caused because the smokeless tobacco product helps mask the pain).

(Boffetta and Straif 2009; England et al. 2010; Gupta and Subramoney 2004; Pau et al. 2003; Quandt et al. 2005; West et al. 2004.)

There has been a steady increase in oral cancer rates in the UK since 1989 (Cancer Research UK 2010). Exactly how smokeless tobacco is linked to this increase is unknown. However, the incidence of oral and pharyngeal cancer is significantly greater among South Asian women (some of the main users of these products in the UK) compared with other women. This is the case, even after controlling for the effect of socioeconomic deprivation (Moles et al. 2008). In Moles' 2008 study, South Asian women were 3.7 times more likely to have oral cancer and 2.1 times more likely to have pharyngeal cancer.

Areca nut, which is often mixed in with South Asian varieties of smokeless tobacco, is also likely to be linked to the prevalence of oral cancer among this group. Areca is a mildly euphoric stimulant. It is addictive and carcinogenic in

its own right – and is widely used among South Asian groups (Auluck et al. 2009; Warnakulasuriya 2002).

Survey results (Moles et al. 2008; Prabhu et al. 2001; The NHS Information Centre 2006) suggest that, in addition to South Asian women, the following South Asian subgroups are more likely to use smokeless tobacco:

- people of Bangladeshi origin
- those in older age groups
- those from lower socioeconomic groups.

First generation South Asian migrants, in particular, those who are less integrated within the wider community, may also be more predisposed to using these products (Prabhu et al. 2001). In addition, South Asian users of these products may be less likely to visit the dentist on a regular basis (Pearson et al 1999).

Smokeless tobacco products are readily available in shops in South Asian neighbourhoods in England. Around 85% of the different products are sold without any regulatory health warning. Generally, they are cheap compared to cigarettes (Longman et al. 2010).

Estimates vary on how much they are used by South Asian communities. The NHS Information Centre (2006) confirmed that Bangladeshis were the biggest users among this community in 2004, with 9% of men and 16% of women saying that they used these products. However, these figures may be an underestimate. For example, another study, based on saliva analysis and questionnaires, reported that 49% of adult Bangladeshi women in Tower Hamlets used these products (Croucher et al. 2002).

One report suggests that smokeless tobacco use fell among the Bangladeshi community between 1999 and 2004 (The NHS Information Centre 2006). However, other sources appear to indicate a rise in use.

First, the number of outlets selling such products appears to be growing (Croucher et al. 2009). Second, over the last 11 years there has been a rise in legal imports of smokeless tobacco, even when the calculation is derived from the balance of imports over exports (HM Revenue & Customs 2011). Third, a recent rise in illegal imports has also been reported (HM Revenue & Customs and UK Border Agency 2008).

Finally, a high percentage of young South Asians, in at least some parts of the UK, are reported to be using these products (Prabhu et al. 2001; Williams et al. 2002). There are also claims that the packaging of these products appears to be targeted at younger people (Panesar et al. 2008).

There is no up-to-date information on current NHS smokeless tobacco cessation initiatives. A 2003 review listed 17 local services in England that claimed to focus on smokeless tobacco – and many South Asians are using such services (Crosier and McNeill 2003). Within mainstream NHS services, there is a general lack of awareness of the problem – and a lack of incentives within the system to address smokeless tobacco.

3 Considerations

The Public Health Interventions Advisory Committee (PHIAC) took account of a number of factors and issues when developing the recommendations.

- 3.1 PHIAC noted that there is limited evidence on the prevalence and severity of smokeless tobacco dependency among South Asians in England. PHIAC was also aware that usage patterns vary greatly from area to area, both demographically and in terms of the products themselves. The Committee noted that these factors will present a challenge when planning services. However, some generalisations can be made. In many locations, for example, use is high among women, in particular, older Bangladeshi women.
- 3.2 Members of PHIAC were aware that smokeless tobacco use may be high among some groups of young South Asians, although there is a lack of recent, high quality research on this. As with smoking, they also recognised that children and young people may experiment with smokeless tobacco before becoming regular users. As a result, although the guidance focuses on cessation, in practice the boundary between prevention and cessation work may be blurred.
- 3.3 Apart from being physically addictive, smokeless tobacco products are, to a large extent, tied into the culture and traditions of some South Asian communities. Offering someone such a product can be a polite social ritual and its use can also have religious connotations. In some cases, smokeless tobacco is part of someone's cultural identity and the upheaval of migration can create a particularly strong attachment to it.
- 3.4 PHIAC noted that people who have migrated to the UK may feel uneasy about certain aspects of Western medical practice, including the idea that an apparently healthy person should seek preventive healthcare services.

- 3.5 Many people who use smokeless tobacco believe that these products are healthy and can help ease indigestion or oral pain. Sometimes they are used because people believe it gives them fresh breath or increases their attractiveness.
- 3.6 People may not always be aware that the products they are using contain tobacco. Some may not recognise a general term like 'smokeless tobacco'. (Often they are much more familiar with the names of the individual varieties, such as paan or gutkha.)
- 3.7 Smokeless tobacco mixtures often contain Areca nut. This nut is psychoactive, possibly carcinogenic and potentially addictive. For some South Asian subcommunities, it has religious significance. Slaked lime, another common ingredient, may cause irritation to the mouth.
- 3.8 PHAC noted the lack of high quality randomised controlled trials (RCTs) on tobacco cessation interventions aimed at South Asian communities and involving South Asian varieties of smokeless tobacco.
- 3.9 In 2004, UK guidelines on helping people to quit smokeless tobacco were produced (West et al. 2004). Although they do not have any statutory status, the guidelines were endorsed by a number of professional groups and health advocacy organisations. They have an implicit focus on South Asians because they are the main users of smokeless tobacco in the UK. The recommendations were based on high-quality controlled studies mainly related to non-South Asian populations who were using non-South Asian forms of smokeless tobacco. The cessation studies mainly involved the use of NRT and counselling. West et al. (2004) appeared to assume that it was reasonable to transfer these findings to South Asian populations, and to the varieties of smokeless tobacco typically used by these populations. Their recommendations were made on this basis (although, ultimately, they concluded that there was a

lack of evidence for NRT). PHIAC discussed the transferability of this evidence and concluded that, in some cases, the interventions may be effective with other smokeless tobacco users in other contexts. However, it also noted that the evidence of effectiveness was generally weak.

- 3.10 PHIAC noted that research explicitly focused on South Asian users provided insight into the cultural reasons why South Asians may use smokeless tobacco, although there was no RCT evidence.
- 3.11 PHIAC was aware of the wide availability of smokeless tobacco from retailers within areas where many South Asian communities live. It was also aware of the relative cheapness of these products compared to cigarettes – and the perceived lack of regulation. However, issues of availability and regulation were outside the scope of NICE guidance.
- 3.12 Practitioners, including doctors, dentists, nurses, midwives and health visitors, are not well-informed about smokeless tobacco products and the harm they can cause.
- 3.13 PHIAC noted that cessation interventions should fit well into an holistic model of care for people who are marginalised and for whom the use of smokeless tobacco is not their main concern. It also noted the importance of using existing NICE guidance on [behaviour change](#), [identifying and supporting people most at risk of dying prematurely](#) and [community engagement](#) when developing interventions that help people from South Asian communities to stop using smokeless tobacco.
- 3.14 PHIAC noted the possible adverse effects of cessation initiatives, in particular, that giving up smokeless tobacco could lead someone to turn to, or smoke more, cigarettes.

- 3.15 There are few, if any, incentives for health professionals to ask people about, and record information on, smokeless tobacco use. This makes it difficult for local commissioners to gauge the prevalence of the habit locally. It also makes it difficult for them to judge whether or not local tobacco cessation services are proving successful.
- 3.16 A threshold analysis estimated that the maximum cost per quitter for a smokeless tobacco intervention to be 'cost effective' depended on someone's age and gender. For someone aged between 20 and 70 years, the cost per quitter ranged from £1758 to £3525 for males, and from £1328 to £2520 for females (when the quality-adjusted life year [QALY] threshold was set at £20,000). At a QALY threshold of £30,000, the cost ranged from £2408 to £4991 for males and from £1795 to £3549 for females.
- 3.17 The threshold analysis estimates (see above) need to be treated with caution due to the severe data limitations:
- lack of evidence on effectiveness
 - lack of data on the incidence and mortality associated with the smokeless tobacco products used in England, in particular, by South Asians
 - uncertainty about the time lag between quitting and gaining health benefits – and the extent to which the damage from smokeless tobacco is irreversible.
- 3.18 PHIAAC noted that brief advice and tailored, targeted services are a highly cost effective way of helping people to quit smoking. See NICE guidance on [brief interventions and referral for smoking cessation](#); [workplace interventions to promote smoking cessation](#); [smoking cessation services](#) and [identifying and supporting people most at risk of dying prematurely](#).

4 Implementation¹

NICE guidance can help:

- Commissioners and providers of NHS organisations, social care and children's services meet national priorities and the requirements of the DH's 'Operating framework for 2011/12'.
- National and local organisations improve quality and health outcomes and reduce health inequalities.
- Local authorities improve the health and wellbeing of people in their area.
- Local NHS organisations, local authorities and other local partners benefit from any identified cost savings, disinvestment opportunities or opportunities for re-directing resources.
- Provide a focus for integration and partnership working across social care, the NHS and public health organisations.

NICE will develop tools to help organisations put this guidance into practice.

Details will be available on our website after the guidance has been issued.

¹ This section will be updated for the final guidance.

5 Recommendations for research

The Public Health Interventions Advisory Committee (PHIAC) recommends that the following research questions should be addressed. It notes that 'effectiveness' in this context relates not only to the size of the effect, but also to cost effectiveness and duration of effect. It also takes into account any harmful/negative side effects.

- 5.1 How prevalent is smokeless tobacco use in England – among the general population and among South Asians, in particular? What trends can be detected over time?
- 5.2 What is the natural progression of disease for South Asian users of smokeless tobacco (for example, how prevalent is oropharyngeal cancer and periodontal disease among users)?
- 5.3 How prevalent is smokeless tobacco use among South Asian women who are pregnant and why? Is there a particular stage during pregnancy when smokeless tobacco is used? What impact does its use during pregnancy have on maternal and child health?
- 5.4 What are the similarities and differences between smokeless tobacco and smoked tobacco in terms of chemical content and the harm that it can cause? Should interventions to help people quit smokeless tobacco differ from those used for smoked tobacco?
- 5.5 How effective and cost effective are the following in terms of short- and long-term quit rates for smokeless tobacco (confirmed by saliva cotinine test)?
 - Pharmacotherapy combined with behavioural support and delivered by health professionals compared to brief advice, behavioural support or pharmacotherapy alone.

- Brief interventions (including brief advice) delivered by community members compared to brief interventions delivered by health professionals.
- Specialist smokeless tobacco services (including outreach services), compared to smokeless tobacco support provided by standard smoking cessation services.
- Training for health professionals (such as midwives, dentists and dental hygienists) to identify users of smokeless tobacco and raise awareness among them of the associated health risks.

How does the effectiveness and cost effectiveness of the above differ by: age, gender and ethnic origin of the recipient; the status of the person delivering the intervention; the way it is delivered; its frequency, length and duration; and the setting in which it is delivered?

- 5.6 Are there any unintended consequences from encouraging people of South Asian origin to stop using smokeless tobacco (for example, do they experience more dental pain or start smoking more tobacco)?
- 5.7 Do people of South Asian origin who use smokeless tobacco visit a dentist as often as the general population?
- 5.8 How comparatively strong are the cultural motivations (stemming from religion and tradition) to use smokeless tobacco among people of South Asian origin, compared with the physical addiction to nicotine? What does this tell us in terms of the content needed to ensure smokeless tobacco cessation programmes are culturally appropriate?
- 5.9 What components of an intervention or which general approaches work best in attracting people of South Asian origin to smokeless

tobacco cessation services? How does this differ by age, gender and ethnic origin?

More detail on the gaps in the evidence identified during development of this guidance is provided in appendix D.

6 Updating the recommendations

This section will be completed in the final document.

7 Related NICE guidance

Published

[Quitting smoking in pregnancy and following childbirth](#). NICE public health guidance 26 (2010).

[Prevention of cardiovascular disease](#). NICE public health guidance 25 (2010).

[School-based interventions to prevent smoking](#). NICE public health guidance 23 (2010).

[Identifying and supporting people most at risk of dying prematurely](#). NICE public health guidance 15 (2008).

[Preventing the uptake of smoking by children and young people](#). NICE public health guidance 14 (2008).

[Smoking cessation services](#). NICE public health guidance 10 (2008).

[Workplace interventions to promote smoking cessation](#). NICE public health guidance 5 (2007).

[Smoking cessation – varenicline](#). NICE technology appraisal 123 (2007).

[Brief interventions and referral for smoking cessation](#). NICE public health guidance 1 (2006).

[Head and neck](#). NICE cancer service guidance (2004).

Under development

Smoking harm reduction. NICE public health guidance (publication expected May 2013).

Smoking cessation: acute and maternity services. NICE public health guidance (publication expected October 2013).

Smoking cessation: mental health services. NICE public health guidance (publication expected October 2013).

8 References

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Appendix A Membership of the Public Health Interventions Advisory Committee (PHIAC), the NICE project team and external contractors

Public Health Interventions Advisory Committee

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 multidisciplinary, comprising public health practitioners, clinicians, local authority officers, teachers, social care professionals, representatives of the public, academics and technical experts as follows.

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

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

Dr Sarah Byford Reader in Health Economics, Centre for the Economics of Mental Health, Institute of Psychiatry, King's College London

Professor K K Cheng Professor of Epidemiology, University of Birmingham

Ms Joanne Cooke Programme Manager, Collaboration and Leadership in Applied Health Research and Care for South Yorkshire

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

Ms Lesley Michele de Meza Personal, Social, Health and Economic (PSHE) Education Consultant, Trainer and Writer

Dr Richard Fordham Senior Lecturer in Health Economics, University of East Anglia; Director, NHS Health Economics Support Programme (HESP)

Professor Ruth Hall Public Health Consultant

Ms Amanda Hoey Director, Consumer Health Consulting Limited

Mr Alasdair J Hogarth Educational Consultant and retired Head Teacher

Dr Ann Hoskins Director, Children, Young People and Maternity, NHS North West

Ms Muriel James Chair of the King Edward Road Surgery Patient Participation Group

Dr Matt Kearney General Practitioner, Castlefields, Runcorn and Primary Care Adviser, Department of Health

CHAIR Professor Catherine Law Professor of Public Health and Epidemiology, UCL Institute of Child Health

Mr David McDaid Research Fellow, Department of Health and Social Care, London School of Economics and Political Science

Mr Bren McInerney Community Member

Professor John McLeod Chair in Clinical Epidemiology and Primary Care, School of Social and Community Medicine, University of Bristol; Honorary Clinical Consultant in Primary Care, NHS Bristol; GP, Hartcliffe Health Centre, Bristol

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

Professor Stephen Morris Professor of Health Economics, Department of Epidemiology and Public Health, University College London

Dr Adam Oliver Research Councils UK Senior Academic Fellow, Health Economics and Policy, London School of Economics

Dr Toby Prevost Reader in Medical Statistics, Department of Public Health Sciences, King's College London

Ms Jane Putsey Lay Member. Registered with the Breastfeeding Network

Dr Mike Rayner Director, 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 Children's Services Improvement Adviser, Solihull Metropolitan Borough Council

Dr Kamran Siddiqi Clinical Senior Lecturer and Consultant in Public Health, Leeds Institute of Health Sciences and NHS Leeds

Dr David Sloan Retired Director of Public Health

Professor Stephanie Taylor Professor of Public Health and Primary Care, Centre for Health Sciences, Barts and The London School of Medicine and Dentistry

Professor Stephen Walters Professor in Medical Statistics and Clinical Trials, University of Sheffield

Dr Dagmar Zeuner Director of Public Health, NHS Richmond and London Borough of Richmond

Expert co-optees to PHIAC:

Samina Dewan Bengali Women's Health Project

Ranjit Dhillon Cardiac Nurse Specialist, Sandwell and West Birmingham Hospitals Trust

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Dr Kiran Patel Consultant, Sandwell and West Birmingham Hospitals NHS Trust

Kawaldip Sehmi Director of Health and Equality, QUIT

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NICE project team

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Nicola Ainsworth Analyst

Patti White Analyst

Lesley Owen Technical Adviser, Health Economics

Patricia Mountain Project Manager

Melinda Kay Coordinator

Sue Jelley Senior Editor

Alison Lake Editor

External contractors

Evidence reviews

Review 1 was carried out by The School of Health and Related Research (ScHARR), University of Sheffield. The principal authors were: Josie Messina, Crystal Freeman, Angie Rees, Ben van Hout, Elizabeth Goyder and Silvia Hummel.

Review 2 was carried out by ScHARR, University of Sheffield. The principal authors were: Josie Messina, Crystal Freeman, Angie Rees, Ben van Hout, Elizabeth Goyder and Silvia Hummel.

Note: the two reviews are presented as one report (see appendix E).

Cost effectiveness

The economic modelling was carried out by ScHARR, University of Sheffield. The principal authors were: Ben van Hout, Silvia Hummel, Crystal Freeman, Josie Messina, Angie Rees and Elizabeth Goyder.

Appendix B Summary of the methods used to develop this guidance

Introduction

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

The minutes of the Public Health Interventions Advisory Committee (PHIAC) meetings provide further detail about the Committee interpretation of the evidence and development of the recommendations.

All supporting documents are listed in appendix E and are available on the [nice website](#).

Guidance development

The stages involved in developing public health intervention guidance are outlined in the box below.

1. Draft scope released for consultation
2. Stakeholder meeting about the draft scope
3. Stakeholder comments used to revise the scope
4. Final scope and responses to comments published on website
5. Evidence reviews and economic modelling undertaken and submitted to PHIAC
6. PHIAC produces draft recommendations
7. Draft guidance (and evidence) released for consultation and for field testing
8. PHIAC amends recommendations
9. Final guidance published on website
10. Responses to comments published on website

Key questions

The key questions were established as part of the scope. They formed the starting point for the reviews of evidence and were used by PHIAC to help develop the recommendations. The overarching questions were:

- Which interventions, or combination of interventions, are effective and cost effective in helping South Asian people to stop using smokeless tobacco in England?
- How should interventions be targeted and tailored for the different subcategories of users within the South Asian community (grouped, for

example, by gender, age, religion, socioeconomic status or by country of origin)?

- What opinions, attitudes or cultural practices encourage (or predispose) South Asian people in England to use smokeless tobacco? Do these factors also determine the particular varieties used?
- Are health professionals aware of the widespread use of smokeless tobacco among South Asian communities and its dangers? Does lack of awareness mean that people are not being referred for, or receiving, support to stop using these products, or that support services are not being commissioned?

These questions were made more specific for each review (see reviews for further details).

Reviewing the evidence

Effectiveness and contextual reviews

Two reviews were conducted.

- Review 1 (effectiveness review) aimed to examine the effect of interventions designed to help South Asians stop using smokeless tobacco.
- Review 2 (contextual review) aimed to examine both the contextual factors associated with smokeless tobacco use among South Asians, and health practitioner's views.

The methodology used in both reviews had some elements in common (see below) and the two reviews are presented in one report ('Systematic review of effectiveness of smokeless tobacco interventions for South Asians and a review of contextual factors relating to smokeless tobacco use among South Asian users and the views of healthcare providers').

Identifying the evidence

A number of databases were searched in July and August 2011 for any kind of evidence published from 1990 onwards. (See the report for details of the databases searched.)

In addition, the following searches were carried out:

- Reference list check of included papers.
- Cited reference search for papers included in the Web of Science database.
- Search of 'grey' literature sources in Open Grey and Health Management Information Consortium (HMIC) databases.

Selection criteria

The effectiveness review (review 1) included studies from any country on interventions to help South Asians stop using smokeless tobacco, as follows:

- Pharmacological interventions for individuals or groups to help them stop using smokeless tobacco.
- Behavioural support or counselling for individuals or groups to help them stop using smokeless tobacco.
- Brief interventions (including brief advice) by health and social care professionals, including dental practitioners and GPs or community members and peers.
- Local, community-based initiatives to raise awareness of the harm caused by smokeless tobacco and to encourage the uptake of cessation services by people who use it.
- Interventions, including those based in schools and the community, to raise awareness and knowledge among health and social care professionals about smokeless tobacco use.

- Interventions that were part of: randomised controlled trials (RCT), non-randomised studies, quasi-experimental, controlled before-and-after studies, process evaluations or qualitative studies.

Studies were excluded from review 1 if they:

- did not cover South Asian populations
- were non-interventional (that is, no intervention was offered).

Review 2 (contextual review) included studies from Organisation for Economic Cooperation and Development (OECD) countries if they were about South Asian people who were current or past users of smokeless tobacco and covered:

- Clinicians, support workers, and frontline staff who have worked with South Asian populations on smokeless tobacco use.
- Views of people who are of South Asian origin who are seeking help to stop using smokeless tobacco.
- Views of friends and family members who know someone who uses smokeless tobacco.
- Knowledge, attitudes or views of clinicians, support workers and frontline health staff towards smokeless tobacco and/or smokeless tobacco interventions.
- Cross-sectional studies that examine smokeless tobacco prevention and use among South Asians.
- Qualitative studies of the views and use of smokeless tobacco among South Asians.
- Reports and project briefs on smokeless tobacco.

Studies were excluded from review 2 if they covered:

- people who were not of South Asian descent
- providers of smokeless tobacco
- non-peer reviewed evidence from websites or blogs or anecdotal evidence on smokeless tobacco.

As noted previously (in 3.2 of the considerations section), the distinction between smokeless tobacco prevention and cessation can be blurred for younger people. For this reason, the reviews included the 'Mobilizing youth for tobacco – related initiatives in India' (MYTRI) project. However, programmes solely focused on prevention were not reviewed.

Quality appraisal

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

Study quality

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

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

– Few or no checklist criteria have been fulfilled. The conclusions of the study are likely or very likely to alter.

The evidence was also assessed for its applicability to the areas (populations, settings, interventions) covered by the scope of the guidance. Each evidence statement concludes with a statement of applicability (directly applicable, partially applicable, not applicable).

Summarising the evidence and making evidence statements

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

The findings from the included studies were synthesised and used as the basis for a number of evidence statements relating to each review question. The evidence statements were prepared by the external contractors (see appendix A). The statements reflect their judgement of the strength (quality, quantity and consistency) of evidence and its applicability to the populations and settings in the scope.

Cost effectiveness

There was a review of economic evaluations and an economic modelling exercise.

Review of economic evaluations

Searches for the cost-effectiveness/economics review were undertaken at the same time as the effectiveness searches, using the term 'South Asian smokeless tobacco users'. The searches were carried out in NHS EED (economic evaluation database) via Wiley and Econ Lit via OVID SP. No relevant studies were found.

Economic modelling

An economic model was constructed to incorporate data from the review of effectiveness (review 1).

The model covered four diseases: cardiovascular disease, oral cancer, pancreatic cancer and periodontal disease. Where additional information requirements were identified, targeted searches were undertaken.

The results are reported in 'Costs and effects of strategies to support quitting the use of smokeless tobacco'. It is available on [NICE's website](#).

Fieldwork

This section will be completed in the final document.

How PHIAC formulated the recommendations

At its meeting in December 2011, the Public Health Interventions Advisory Committee (PHIAC) considered the evidence and cost effectiveness to determine:

- whether there was sufficient evidence (in terms of strength and applicability) to form a judgement
- where relevant, whether (on balance) the evidence demonstrates that the intervention or programme/activity can be effective or is inconclusive
- where relevant, the typical size of effect (where there is one)
- whether the evidence is applicable to the target groups and context covered by the guidance.

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

- Strength (type, quality, quantity and consistency) of the evidence.
- The applicability of the evidence to the populations/settings referred to in the scope.
- Effect size and potential impact on the target population's health.
- Impact on inequalities in health between different groups of the population.
- Equality and diversity legislation.
- Ethical issues and social value judgements.
- Cost effectiveness (for the NHS and other public sector organisations).
- Balance of harms and benefits.
- Ease of implementation and any anticipated changes in practice.

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).

Appendix C The evidence

This appendix lists the evidence statements from two reviews which were combined into one report and provided by an external contractor (see appendix A and appendix E). It links them to the relevant recommendations. See appendix B for the meaning of the (++) , (+) and (-) quality assessments referred to in the evidence statements.

Appendix C also sets out a brief summary of findings from the economic analysis.

The evidence statements are short summaries of evidence in a review.

Evidence statement number 1 indicates that the linked statement is numbered 1 in the review 'Systematic review of effectiveness of smokeless tobacco interventions for South Asians and a review of contextual factors relating to smokeless tobacco use among South Asian users and the views of healthcare providers'.

The review and economic analysis are available at the [NICE website](#). Where a recommendation is not directly taken from the evidence statements, but is inferred from the evidence, this is indicated by **IDE** (inference derived from the evidence).

Where the Public Health Interventions Advisory Committee (PHIAC) has considered other evidence, it is linked to the appropriate recommendation below. It is also listed in the additional evidence section of this appendix.

Recommendation 1: Evidence statements 32, 34, 35.

Recommendation 2: Evidence statements 16, 17, 18.

Recommendation 3: IDE

Recommendation 4: Additional evidence (West et al. 2004).

Recommendation 5: Evidence statements 27, 43, 44.

Recommendation 6: Evidence statements 2, 3, 5, 33, 34, 42.

Evidence statements

Please note that the wording of some evidence statements has been altered slightly from those in the evidence reviews to make them more consistent with each other and NICE's standard house style. The superscript numbers refer to the studies cited beneath each statement. The full references for those studies can be found in the reviews.

Evidence statement 2 Behavioural support – counselling alone

Brief advice and encouragement

There was moderate evidence from one (+) UK quasi-experimental study¹ that brief advice and encouragement can have a positive effect on quitting tobacco among South Asians. Findings showed that of those who completed the 4-week Bangladeshi Stop Tobacco Project (BSTP) and reported successfully quitting tobacco, 17% used brief advice and encouragement without nicotine replacement therapy (NRT) as their method of cessation. This evidence is applicable to a UK setting as this study was conducted in the UK.

Focus group discussions

There was weak evidence from one (-) Indian interventional cohort study² that focus group discussion sessions had a positive effect on self-reported tobacco quit rates in South Asians. Quit rates following the first, second, third, fourth, fifth and sixth focus group sessions of the World No Tobacco Day (WNTD) cessation programme were 30%, 44%, 48%, 46%, 46% and 48% respectively – with an overall quit rate of 40% at the end of the study. This evidence is partially applicable to people of South Asian origin living in the UK who may have maintained cultural and social practices related to smokeless tobacco use.

¹ Croucher et al. 2003a

² Mishra et al. 2009

Evidence statement 3 Behavioural support – counselling and pharmacotherapy

There was moderate evidence from one (+) UK quasi-experimental study¹, one (+) UK retrospective review of client records² and one (-) Indian interventional cohort study³ that behavioural support and pharmacotherapy in combination can have a positive effect on stopping tobacco use among South Asians. One (+) study² found that use of NRT with behavioural support was an independent predictor of a successful cessation attempt (odds ratio [OR] = 5.38, 95% confidence interval [CI] 2.71, 10.70), while another (+) study¹ found that at the end of the 4-week BSTP cessation programme, 19.5% of completers had stopped tobacco use – of which 22% had received NRT in addition to behavioural support. Furthermore, BSTP clients who chose the addition of NRT made a significantly greater reduction in their salivary cotinine scores at final review compared to baseline.

In the (-) study of the WNTD cessation programme³, five tobacco users were offered pharmacotherapy. One employee quit tobacco while two employees did not comply with the pharmacotherapy because of side effects following the use of bupropion. The overall quit rate among the pharmacotherapy and behavioural support group was 20%. This evidence is partially applicable to UK settings and to people of South Asian origin living in the UK who may have maintained cultural and social practices related to smokeless tobacco use.

¹ Croucher et al. 2003a

² Croucher et al. 2011c

³ Mishra et al. 2009

Evidence statement 5 Adverse events and withdrawal symptoms

There is moderate evidence from one (+) UK quasi-experimental study¹, one (+) UK pilot study², one (-) UK progress review study³ and one (-) Indian interventional cohort study⁴ that adverse events and withdrawal symptoms can affect quit success among South Asians. Interim results from a study of the BSTP³ reported that clients who experienced a lower mean number of withdrawal symptoms or lower mean number of adverse events at first follow-up at 2 weeks were more likely to make a successful quit attempt. Another (+)

study² found that BSTP clients with fewer withdrawal symptoms at first follow-up was significantly associated with a successful quit attempt ($p = 0.005$). Fewer NRT-related adverse events at first follow-up were also significantly associated with a successful quit attempt ($p = 0.028$) while those reporting oral pain and discomfort at first follow-up were less likely to make a successful quit attempt ($p = 0.034$). One (+) study¹ found that oral pain was reported as a barrier to successful oral tobacco cessation by 62% of the volunteers at final review.

The (-) study⁴ of the WNTD programme showed that employees who relapsed after initial quitting stated physical discomfort like constipation as a reason for relapse and not achieving successful cessation. This evidence is partially applicable to UK settings and to people of South Asian origin living in the UK who may have maintained cultural and social practices related to smokeless tobacco use.

¹ Croucher et al. 2003a

² Croucher et al. 2011b

³ Croucher et al. 2011a

⁴ Mishra et al. 2009

Evidence statement 16 Local community-based initiatives to raise awareness: tobacco use prevalence rates

There is moderate evidence from one (+) Indian randomised controlled trial (RCT)¹ that showed tobacco education interventions which raise awareness about the harmful effects of tobacco can have a positive effect on prevalence rates of tobacco use among South Asians. Post-intervention, results from the Anti-Tobacco Community Education Program (ATCEP) showed a decline in rates from baseline to final assessment at 3 years – with a 10.2% decrease for males in the experimental area compared to 2.1% and 0.5% decrease in the control areas ($p < 0.0001$). For females, there was a 16.3% reduction in the experimental area compared to 2.9% and 0.6% in the control areas ($p < 0.0001$). Post-intervention, there was a 5.6% reduction in the percentage of males who reported tobacco chewing compared to 1.2% and 0% reduction in the control areas ($p < 0.0001$) This evidence is partially applicable to people

of South Asian origin living in the UK who may have maintained cultural and social practices related to smokeless tobacco use.

¹ Anantha et al. 1995

Evidence statement 17 Local community-based initiatives to raise awareness: – initiation rates of tobacco use

There is mixed evidence from one (+) Indian RCT¹ that showed tobacco education interventions which raise awareness about the harmful effects of tobacco can have a positive effect on decreasing initiation rates of tobacco use among South Asians. Baseline initiation rates of tobacco use from the ATCEP showed that male rates were comparable between the experimental and control areas. However, the rate among females was different. Initiation rates of tobacco use in the experimental area showed a statistically significant decline in males ($p < 0.01$) and females ($p = 0.005$) between the baseline and the first follow-up surveys at 2 years. At the final 3-year assessment, males in the first control area did not show a statistically significant decline in the initiation rate ($p = 0.16$). At the final 3-year assessment, the initiation rate of chewing among males was 0.2% and that of smoking 0.1% in the experimental area. In control area one, the initiation rate of chewing was 0.1% compared with 0.3% for smoking. In control area two, the initiation rates were 0.4% and 0.9% for chewing and smoking respectively. This evidence is partially applicable to people of South Asian ancestry living in the UK who may have maintained cultural and social practices related to smokeless tobacco use.

¹ Anantha et al. 1995

Evidence statement 18 Local community-based initiatives to raise awareness: quit rates

There is mixed evidence from one (+) Indian RCT¹ that showed tobacco education interventions which raise awareness about the harmful effects of tobacco can have a positive effect on increasing quit rates of tobacco use among South Asians. Results from the ATCEP indicated that the numbers and rates of persons who had quit using tobacco at the time of first repeat

survey at 2 years was much higher in the experimental area compared with the control areas (in males, 26.5% in the experimental area versus 3.2% and 1.1% in control areas one and two, respectively; and in females, 40.7% in the experimental area versus 2.4% and 0.2% in control areas one and two, respectively). By the end of follow-up at 3 years, results from the experimental area showed a decrease in quitters' by 4.0% in females and no change in the rate for males. The quit rate among male chewers also showed a decrease over time as well – with the percentage of quitter declining from 32.0% to 30.2% between the first follow-up survey at 2 years and the final survey at 3 years. This evidence is partially applicable to people of South Asian origin living in the UK who may have maintained cultural and social practices related to smokeless tobacco use.

¹ Anantha et al. 1995

Evidence statement 27 Deliverers of intervention components

There is moderate evidence from one (+) Indian cluster RCT¹ study that showed tobacco preventive interventions delivered by teachers and peers can have a positive effect on intervention outcomes. A process evaluation of project 'Mobilizing youth for tobacco—related initiatives in India' (MYTRI) found that the proportion of teachers trained in a school correlated with better implementation of objectives ($r = 0.58$, $p < 0.02$) and superior communication between peer leaders and students ($r = 0.75$, $p < 0.001$). It was also of greater benefit in lowering the susceptibility to chewing tobacco ($r = 0.53$, $p < 0.05$). Furthermore, the communication between students and peer leaders ($r = 0.66$, $p < 0.005$) and higher proportion of students participating in the classroom discussions ($r = 0.70$, $p < 0.005$) correlated with better outcomes. Schools with a higher proportion of teachers trained also had better communication between the students and peer leaders. This evidence is partially applicable to people of South Asian origin living in the UK who may have maintained cultural and social practices related to smokeless tobacco use.

¹ Goenka et al. 2010

Evidence statement 32 Characteristics of users

Moderate evidence from eight UK studies including two reports (both [+])^{1,2} and six cross sectional surveys (four [+])^{3,4,5,6}; (two [++])^{7,8} reported on how many respondents used smokeless tobacco. One (+) study² showed that 8% of the South Asians in Leicester used smokeless tobacco products. Another (++) study⁸ found that 30% of Bangladeshi men within Tower Hamlets tobacco were users of smokeless tobacco. Another (+) study⁶ showed that betel-quid use was highest in Hindus from Leicester (21%) followed by 5% of Muslims and Jains. In a (+) Bangladeshi sample from Tower Hamlets⁵, 78% chewed paan, with 52% adding tobacco. In another (++) study in Tower Hamlets⁷ half (49%) of female Bangladeshis used smokeless tobacco. A separate (+) Tower Hamlet study³ reported betel quid chewing was over 80% with no gender difference, and tobacco was added to paan by more women (43%, n = 32) than men (29%, n = 19) (p = 0.09). In an (+) East London study⁴, 28% of Bangladeshi adolescents sampled used betel quid, with 12% adding tobacco.

¹ HDA 2000

² Rees 2007

³ Ahmed et al. 1997

⁴ Bedi and Gilthorpe 1995

⁵ Pearson et al. 1999

⁶ Vora et al. 2000

⁷ Croucher et al. 2002

⁸ Croucher et al. 2007

Evidence statement 33 Social acceptability

Moderate evidence from one (+) UK qualitative study¹ set in Tower Hamlets and two UK cross-sectional studies (both [+])^{2,3} set in Birmingham and Tower Hamlets examined social acceptability of smokeless tobacco use among the genders. The studies found that smokeless tobacco is traditionally and culturally more appropriate for the female gender among South Asian communities. One (+) study² found that females appeared to be more accepting of their own chewing habits, while men did not, and there was a general consensus that children should not be using betel quid.

¹ Croucher and Chounhury 2007

² Ahmed et al. 1997

³ Bedi and Gilthorpe 1995

Evidence statement 34 Gendered use patterns

Contradictory evidence was found regarding gendered patterned use of smokeless tobacco in four UK cross-sectional studies (all [+])^{1,2,3,4}. In a (+) Birmingham study¹ there were similar levels of betel quid use for Bangladeshi men (92%) and females (96%). In a (+) study set in East London³, similar betel quid use between genders in a Bangladeshi sample was noted. In contrast, in the (+) Birmingham study¹ more Bangladeshi women (81%) added tobacco to their quids than men (37%). Furthermore, a (+) Tower Hamlets study² reported a greater proportion of Bangladeshi women were chewing more than men, and females were more likely to add tobacco to their paans than males ($p < 0.01$). According to a (+) Yorkshire study of first generation Bangladeshi women⁴, paan was used by 95% (282/295) of women and 62% (174/295) of paan users added leaf tobacco.

¹ Bedi and Gilthorpe 1995

² Pearson et al. 1999

³ Prabhu et al. 2001

⁴ Summers et al. 1994

Evidence statement 35 Onset of use

Moderate evidence from one (+) UK qualitative report¹, and four UK cross-sectional studies (all [+])^{2,3,4,5} investigated the age and location of onset of smokeless tobacco use. Smokeless tobacco use was more prevalent among older South Asians; however, younger UK-born South Asians are using smokeless tobacco products¹. In a (+) Tower Hamlets study², 75% of smokeless tobacco users started in Bangladesh, but 25% of both sexes started chewing paan in London and were younger (average age 34 years) than those who started in Bangladesh (average age 44 years). The mean age of onset of Bangladeshi users in Tower Hamlets was aged 20 years (range 6–56). By 17 years 50% were chewing paan, with more males commencing chewing paan by 15 years of age than females ($p < 0.05$)³. According to evidence from a (+) study in East London⁴, the median age of first chewing was as early as age 9 with most (86%) starting their chewing habits while living in London. In a (+) Yorkshire study⁵, 18% (51/295) were chewing by age 10 years with a mean onset of 17 years.

¹ HDA 2000

² Ahmed et al. 2007

³ Pearson et al. 1999

⁴ Prabhu et al. 2001

⁵ Summers et al. 1994

Evidence statement 42 Substitution for cigarettes

Moderate evidence from one (+) UK qualitative paper¹ revealed younger Bangladeshi men from Tower Hamlets may use paan as a way to obtain tobacco without smoking cigarettes, although problems of addiction to smokeless tobacco may still be present, making quitting difficult.

¹ Croucher and Chounhury 2007

Evidence statement 43 Awareness and advice from dentists

Moderate evidence from two UK cross-sectional survey studies (both [+])^{1,2} of dental professionals in the UK examined awareness and advice of dental professionals. Dentists from Harrow were almost twice as likely to neglect to offer areca cessation to patients than neglect to provide smoking tobacco cessation counselling, citing that awareness of the issues and lack of understanding of support needed was a barrier². Of dentists that were aware of oral health impacts caused by smokeless tobacco use, half believed that it was a significant problem for their patients and this was especially true for dentists in Bradford and Kirklees than in Leeds¹.

¹ Csikar et al. not published

² Nathan 2010

Evidence statement 44 Barriers and support needed for practitioners

Moderate evidence from three UK cross-sectional survey studies (all [+])^{1,2,3} examined barriers and support needed for counselling on smokeless tobacco. In a (+) survey of Yorkshire dentists¹: 75% (279/372) wanted access to resources; 32% (90/372) required information on discussing smokeless tobacco; 30% (84/372) wanted waiting room resources; 22% (62/372) indicated assistance with oral cancer detection and 15% (43/372) wanted training. Another (+) study² revealed that dentists had a lack of information about counselling and did not feel equipped to help. Ethnicity of dentists plays a role in counselling as 75% of Asian/African dentists were more likely to

provide support than white dentists (43%) ($p < 0.006$). The (+) Tower Hamlets study³ showed that language barriers between South Asian clients and practitioners exist, as 73% of first generation Bangladeshi Tower Hamlets residences experienced language issues while visiting health professionals, with more females (94%) than males (58%) experiencing this problem ($p < 0.001$); resulting in only 20% registered with a dentist, and only 33% had visited a dentist in the past year, while 25% never visited a dentist.

¹ Csikar et al. not published

² Nathan 2010

³ Pearson et al. 1999

Additional evidence

West R, McNeill A, Raw M (2004) Smokeless tobacco cessation guidelines for health professionals in England. *British Dental Journal* 196 (10): 611–8

Economic modelling

The systematic review of cost effectiveness did not identify any studies of interventions to help South Asian populations in England quit using smokeless tobacco. Instead, an economic analysis was undertaken to estimate the long-term costs and effects if someone stops using these products.

Four disease models (for cardiovascular disease, oral cancer, pancreatic cancer and periodontal disease) were combined in a single framework. To estimate the costs and effects of quitting the use of smokeless tobacco, an average person was compared with someone at increased risk of these diseases due to using these products.

The results differed according to age: the older the person was, the smaller were the expected health gains and the resulting savings. The results also differed by gender, with females expected to gain more benefits for a lower cost. However, when a discount rate was applied to the cost and effects, the results changed. With discounting, the expected savings appeared greatest around the age of 50 for both males and females – and for each of the three diseases modelled.

The maximum costs per quitter for a strategy to be called 'cost effective' when using a limit of £20,000 or £30,000 per quality-adjusted life year (QALY) may depend on age and gender. For someone aged between 20 and 70 years, the cost per quitter ranged from £1758 to £3525 for males, and from £1328 to £2520 for females (when QALY threshold was set at £20,000). At a QALY threshold of £30,000, the cost ranged from £2408 to £4991 for males and from £1795 to £3549 for females.

However, the estimates need to be treated with caution due to the severe data limitations:

- lack of published evidence on the effectiveness of interventions
- lack of data on the incidence and mortality associated with the types of smokeless tobacco used in England and, importantly, used predominantly by South Asians in England
- uncertainty about the time lag between quitting and gaining any health benefits – and the extent to which the damage from smokeless tobacco is irreversible.

Appendix D Gaps in the evidence

The Public Health Interventions Advisory Committee (PHIAC) identified a number of gaps in the evidence related to the interventions under examination, based on an assessment of the evidence. These gaps are set out below.

1. There is a lack of evidence about whether behavioural support or counselling (for individuals or groups) can reduce the prevalence of self-reported smokeless tobacco use among South Asians.
2. There is a lack of evidence about the effectiveness of brief interventions (including brief advice) delivered by health and social care professionals to South Asians who use smokeless tobacco.
3. There is a lack of evidence about the effectiveness of brief interventions delivered to South Asians by community members or their peers in terms of:
 - a) How they help people quit using smokeless tobacco.
 - b) The adverse effects and withdrawal symptoms experienced.
4. There is no evidence about whether adverse events and withdrawal symptoms prevent South Asians from quitting smokeless tobacco.
5. There is a lack of evidence about whether changes in psychosocial factors (such as knowledge, attitudes or beliefs) impact on smokeless tobacco use among South Asians.
6. There is a lack of evidence about whether brief interventions (including brief advice) given by health and social care professionals have an impact on smokeless tobacco use among South Asians.
7. There is no evidence about how comparatively effective an intervention is when delivered in different settings.

8. There is no evidence about what effect different intervention components have on smokeless tobacco quit rates.
9. There is a lack of evidence about how the level of intensity of an intervention impacts on smokeless tobacco quit rates.
10. There is a lack of evidence on how age impacts on smokeless tobacco quit rates among South Asians.
11. There is a lack of evidence about how ethnicity impacts on smokeless tobacco quit rates among South Asians.
12. There is no evidence on which factors determine the particular variety of smokeless tobacco used by different people of South Asian origin.
13. There is no evidence on whether or not smokeless tobacco cessation interventions are cost effective.

(**Source:** evidence review 1.)

Appendix E Supporting documents

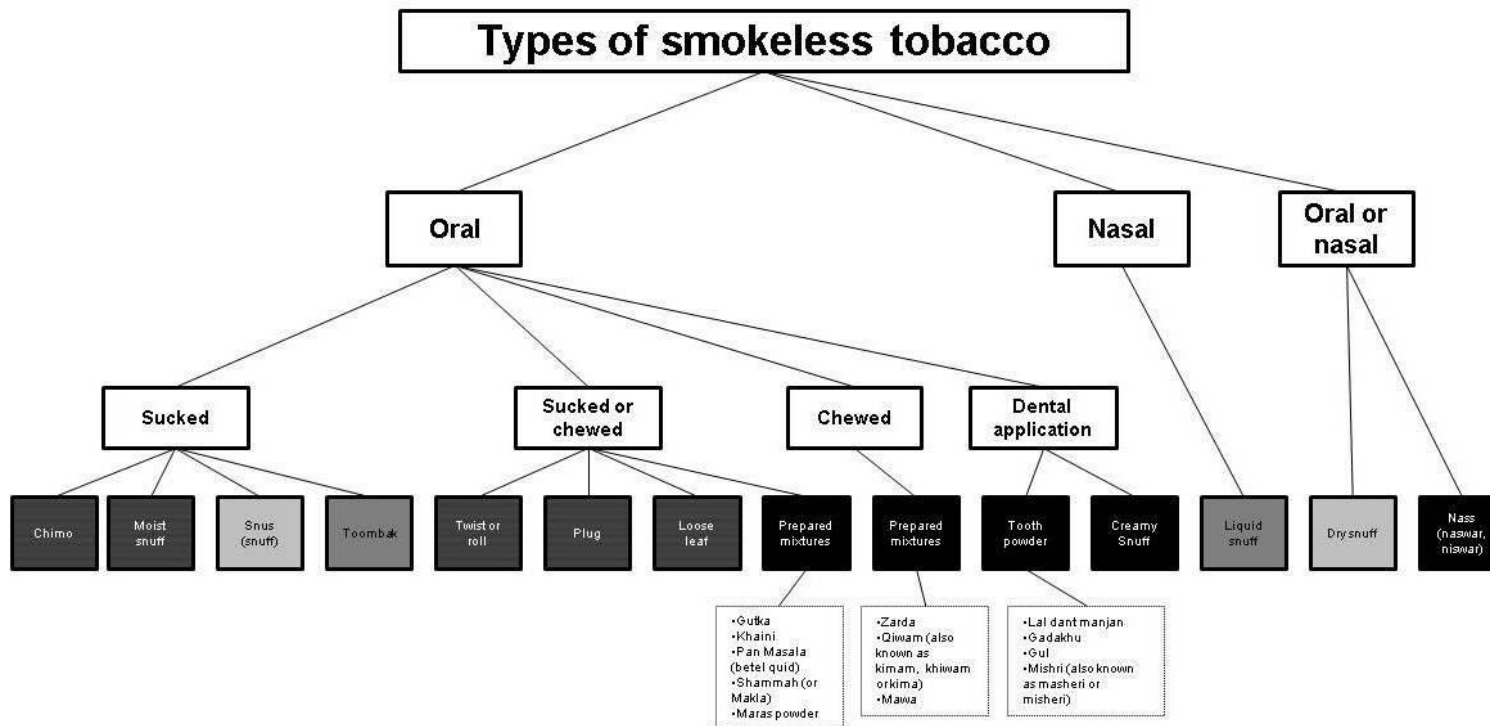
[Supporting documents](#) include the following.

- Evidence reviews 1 and 2: ‘Systematic review of effectiveness of smokeless tobacco interventions for South Asians and a review of contextual factors relating to smokeless tobacco use among South Asian users and the views of healthcare providers’.
- Economic modelling: ‘Costs and effects of strategies to support quitting the use of smokeless tobacco’.

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 \(second edition, 2009\)’](#)

Appendix F Types of smokeless tobacco



Key: Region or ethnicity of predominant users of each substance:

Asia and the Middle East, including UK citizens with ancestry from these regions
Africa
North or South America
Mixture of ethnicities and regions