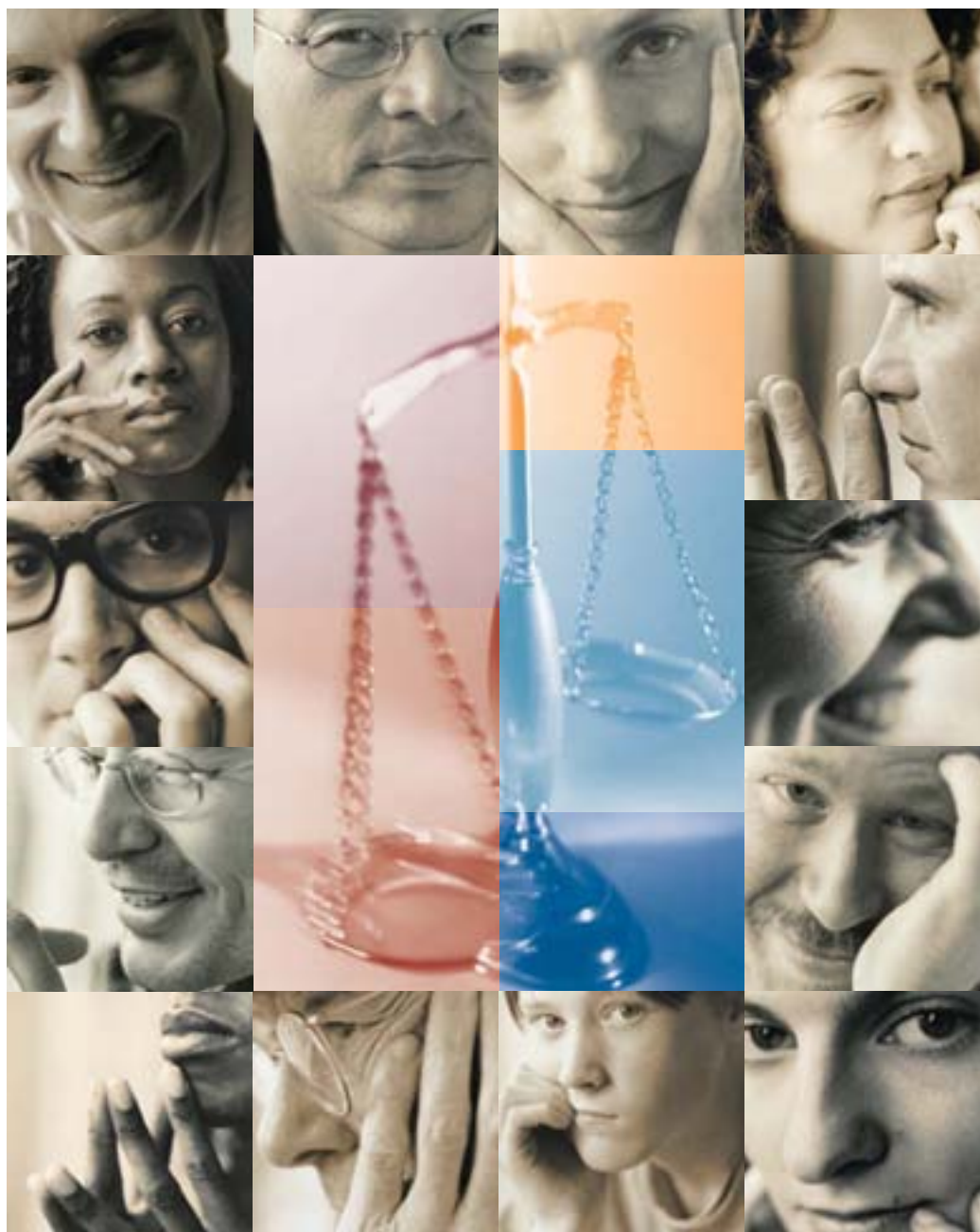


# Smoking Cessation Guidelines

FOR AUSTRALIAN GENERAL PRACTICE



PRACTICE HANDBOOK  
2004 EDITION

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# 1. Background

## Aims of the guidelines

Tobacco smoking is responsible for the deaths of approximately 19,000 Australians each year (Ridolfo and Stevenson, 2001). These guidelines aim to assist general practitioners (GPs) and their practice staff to more effectively identify smokers and assist them to stop smoking. The guidelines are an adaptation of the “5As” for brief intervention that are the basis of the United States *Clinical Practice Guideline Treating Tobacco Use and Dependence* (Fiore et al, 2000). The “5As” approach was a development of the 4As approach of the United Kingdom guidelines (Raw et al, 1998). The 5As approach has also been used as the basis of revised guidelines for smoking cessation in New Zealand (*National Health Committee, 2002*). The Royal Australian College of General Practitioners has published *Guidelines for preventive activities in general practice (RACGP, 2002)* which include brief guidelines for smoking cessation. These smoking cessation guidelines for Australian general practice have been developed from a review of all of these materials plus guidelines produced for special groups.

These guidelines also build on work conducted in Australia on assisting smoking cessation and on other risk factors for preventable disease. The Smokescreen Program was the first program to apply the Stage of Change Model (Prochaska and DiClemente, 1983) in the general practice setting. Developed by Professor Robyn Richmond and colleagues, the Smokescreen Program (Richmond et al, 1991) acknowledges that the smoker’s own motivation to stop is a key issue and advice is provided based on the smoker’s readiness to quit. The Smokescreen Program has been extensively studied in general practice (Richmond and Anderson 1994; Richmond 1996; Richmond, 1996; Richmond and Mendelsohn 1998). In a study of the efficacy of the Smokescreen Program involving three GPs and 200 smokers there was an abstinence rate of 36% in intervention group and 8% in the non-intervention control group at three years follow-up (Richmond et al, 1986). A larger study involving 26 GPs and 450 smokers showed that those offered counselling using the Smokescreen approach and nicotine replacement therapy had an abstinence rate of 19% after one year compared to 12% abstinence in those offered the nicotine gum and minimal advice (Richmond et al, 1993). Smokescreen was widely disseminated to GPs in Australia and New Zealand in the 1990s through workshops organised in collaboration with Divisions of General Practice and Independent Practitioners Associations. The guideline development process provides the opportunity to produce updated resources for general practitioners that build on the experience of the Smokescreen Program and explicitly incorporate the 5As approach.

These guidelines link smoking cessation advice in general practice to the National Tobacco Campaign and to the materials and support services provided through the Quitlines operating in each state and territory. These smoking cessation guidelines are consistent with the approach to risk factor identification and intervention of the Smoking, Nutrition, Alcohol and Physical Activity (SNAP) Framework suggested by the Joint Advisory Group on General Practice and Population Health (June 2001). The SNAP framework and these guidelines both recognise that, though evidence of effectiveness of brief advice and other strategies for smoking cessation such as

# 1. Background

pharmacotherapy has been known for some years, the implementation of these strategies has been variable and not well supported. The RACGP publication *Putting prevention into practice* (RACGP, 1998) has sought to assist GPs to create systems in their practice to support preventive activities.

The evidence base that underpins these guidelines has been drawn from the National Tobacco Strategy publication *Smoking cessation interventions: review of evidence and implications for best practice in health care settings* (Miller, 2001). The guidelines were developed by a project group from University of New South Wales School of Public Health and Community Medicine, The Cancer Council Victoria and General Practice Education Australia. An extensive process of stakeholder consultation has also informed the development. This process led to Flinders University's involvement in the project group, representing the GPs assisting smokers program (GASP).

## Evidence and recommendation rating system

As in the RACGP publication *Guidelines for preventive activities in general practice* (2002), these guidelines provide both a rating of the level of evidence for an activity and a rating for the recommendation based on a review of this evidence. The levels of evidence are coded by Roman numerals I–V. The strength of recommendation is coded by the letters of the alphabet A–C (Table 1). The grading system is an adaptation from the NHMRC handbook *How to Assess the Evidence: Assessment and application of scientific evidence* (NHMRC, 2000).

### Levels of evidence

Level I	Evidence obtained from systematic review of relevant randomised controlled trials
Level II	Evidence obtained from one or more well-designed, randomised controlled trials
Level III	Evidence obtained from well-designed, non-randomised controlled trials; or from well-designed cohort or case control studies
Level IV	Evidence obtained from case series, either post-test or pre-test and post-test
Level V	Opinions of respected authorities based on clinical experience, descriptive studies, reports of expert committees
No evidence	After searching no evidence was found relevant to general practice on the issue being considered.

### Strength of recommendation

A	There is good evidence to support the recommendation
B	There is fair evidence to support the recommendation
C	There is poor evidence regarding the inclusion or exclusion of the recommendation but recommendations may be made on other grounds.

## 2. Summary of Evidence and Recommendations

### 1. Smoking cessation counselling

#### 1.1 Counselling from health professionals

Evidence	Level	Recommendations	Strength
Instituting a system designed to identify and document tobacco use almost doubles rate of clinician intervention and results in higher rates of cessation.	II	A system for identifying all smokers and documenting tobacco use should be used in every practice.	A
Smoking cessation advice from health professionals is effective in increasing quit rates. The major effect of advice is to help motivate a quit attempt.  All health professionals can be effective in providing smoking cessation advice.	I	All smokers should be offered brief advice to quit.	A
Factors consistently associated with higher abstinence rates are high motivation, readiness to quit, moderate to high self-efficacy and supportive social networks.	III	Assessment of readiness to quit is a valuable step in planning treatment.	B
Brief smoking cessation advice from doctors delivered opportunistically during routine consultations has a modest effect size but substantial potential public health benefit.	I	Offer brief cessation advice in routine consultations whenever possible (at least annually).	A
Follow-up is effective in increasing quit rates.	I	All smokers attempting to quit should be offered follow-up.	A
Relapse prevention advice can reduce relapse rate.	II	All smokers attempting to quit should be offered relapse prevention advice.	A

## 2. Summary of Evidence and Recommendations

### 1.2 Counselling from other sources

Evidence	Level	Recommendation	Strength
Counselling and advice from other sources can be effective. In general more intensive programs have greater effect.	I	Where smokers cannot be adequately counselled in the practice offer referral to other services.	A
Telephone callback counselling services are effective in assisting cessation for smokers who are ready to quit.	II	Referral to such services should be considered for this group of smokers.	A
Telephone counselling can be effective in assisting cessation in smokers who are not ready to quit.	IV	Referral to such services should be considered for this group of smokers.	C

### 2. Pharmacotherapies to assist cessation

Pharmacotherapy with Nicotine Replacement Therapy or bupropion sustained release is an effective aid to assisting motivated smokers to quit.	I	In the absence of contraindications, pharmacotherapy should be offered to all motivated smokers who have evidence of nicotine dependence. Choice of pharmacotherapy is based on clinical suitability and patient choice.	A
Compliance with pharmacotherapy, especially duration of use, is an important influence on success rates.	II	Smokers using pharmacotherapy should be encouraged to use it for a sufficient period (8 weeks with NRT and at least 7 weeks with bupropion sustained release).	A

## 2.1 Nicotine Replacement Therapy (NRT)

Evidence	Level	Recommendation	Strength
Nicotine gum, nicotine transdermal patch, nicotine nasal spray, nicotine inhaler and nicotine sublingual tablet all increase quit rates at five to 12 months approximately two-fold compared with placebo and regardless of the setting.	I	NRT should be recommended to nicotine dependent smokers, the choice of product depending on practical and personal considerations.	A
There is no significant difference in the effectiveness of different forms of NRT in achieving cessation at five to 12 months.	I	NRT should be recommended to nicotine dependent smokers. The choice of product depends on practical and personal considerations.	A
In people smoking more than 20 cigarettes per day 4mg gum is more effective than 2mg gum.	II	If nicotine gum is chosen as the form of NRT then 4mg gum should be suggested for heavy smokers.	A
In more dependent smokers combinations of different forms of NRT are more effective than one form alone.	II	Combination NRT should be offered if patients are unable to remain abstinent or continue to experience withdrawal symptoms using one type of therapy.	A
There is no evidence of increased risk for use of NRT in people with stable cardiovascular disease.	II	NRT can be used safely in patients with stable cardiovascular disease.	A
Several studies have documented the lack of an association between the nicotine patch and acute cardiac events.	II	NRT should be used with caution in recent MI, unstable angina, severe arrhythmias or recent CVA. These patients should be warned of the danger of concurrent smoking.	C
There is currently a lack of evidence on the safety of NRT in pregnancy but reports of expert committees have recommended use in certain circumstances.	V	Pharmacotherapy with NRT should be considered when a pregnant woman is otherwise unable to quit, and when the likelihood and benefits of cessation outweigh the risks of NRT and potential continued smoking.	C



## 2. Summary of Evidence and Recommendations

### 2.2 Bupropion sustained release

Evidence	Level	Recommendation	Strength
Bupropion sustained release is an efficacious smoking cessation treatment.	I	Bupropion sustained release should be recommended to smokers who have been assessed as clinically suitable for this medication and provided in combination with counselling.	A
Combination treatment with bupropion and nicotine patch is effective.	II	Combination treatment with bupropion and nicotine patch should be considered where a smoker has not been successful on an adequate trial of one of these therapies. Blood pressure should be monitored during treatment.	C
Bupropion sustained release is equally effective in assisting smoking cessation in people with and without a history of depression.	II	Bupropion sustained release should be considered as pharmacotherapy to assist cessation in smokers with current or past history of depression.	C

### 2.3 Other pharmacotherapy

Nortriptyline is an efficacious smoking cessation treatment in people with and without a history of depression.	II	Nortriptyline should only be considered as a second-line agent due to its adverse effects profile.	B
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### 3. Other evidence and recommendations

Evidence	Level	Recommendation	Strength
There is no significant effect of acupuncture or hypnotherapy in smoking cessation.	I	On the evidence available acupuncture and hypnotherapy are not recommended as aids to smoking cessation.	A
Continued smoking is a major factor in the recurrence or increasing severity of smoking related diseases.	III	Smoking cessation should be a major focus of the management of people with smoking related illnesses.	A
Introducing smoking restrictions into the home can assist quitting smoking successfully.	IV	People attempting to quit should be advised to ban or restrict smoking by others in their homes.	C

## 3. Smoking and Health

### Smoking prevalence

The National Drug Strategy Household Survey (2001) examined the extent of drug use in people aged 14 years and over. It found the following rates of tobacco smoking.

- 21% of Australians aged 14 and over are daily or weekly smokers (19.5% daily and 1.6% weekly)
- 21% of men and 18% of women are daily smokers
- 15% of young people aged 14-19 are daily smokers: 16.2% of female teenagers and 14.1% of male teenagers
- Smoking rates peak in the 20-29 age group
- Mean number of cigarettes per week is 109 (16 per day).

Prevalence is much higher in certain groups in the population. Among Aboriginal and Torres Strait Islanders (ATSI) the rates vary between communities but overall is about 55% for men and 30% for women (ABS, 1999). In people with mental health problems estimates range from 50 to 80% (Hughes, 1993; Polgar 1996). Smoking prevalence has been falling in Australia since the end of World War II at which time nearly three-quarters of the adult male population, and about one-quarter of adult females were smokers (Winstanley et al, 1995). There is, however, no reason for complacency when tobacco smoking is such a major cause of death and disability. The economic costs of tobacco use to the Australian community are estimated to be \$21 billion per year (Collins et al, 2002).

### Health effects of smoking

Tobacco smoke contains over 4000 chemical compounds including tar, carbon monoxide, nicotine, hydrogen cyanide, acetone, ammonia, arsenic, phenol, naphthalene, cadmium and polyvinyl chloride. Many of these agents are toxic and at least 43 can cause cancer ([www.treatobacco.net](http://www.treatobacco.net)). Examples of these are nitrosamines and benzopyrines. Nicotine is the chemical responsible for the addictive nature of cigarette smoking but is not the major component associated with disease caused by smoking.

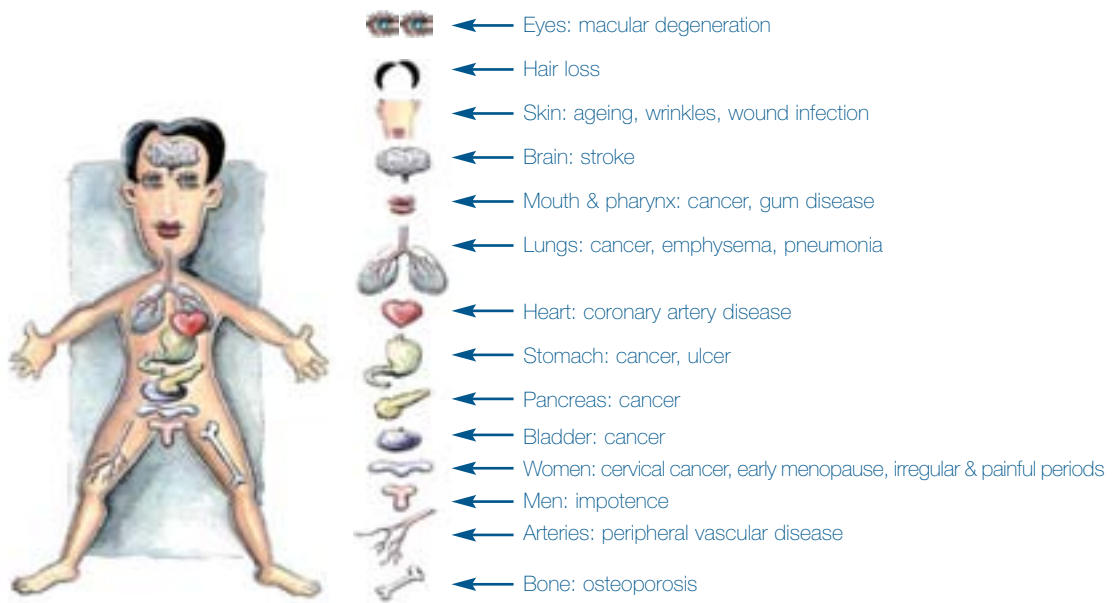
Tobacco smoking is the risk factor responsible for the greatest burden of disease (loss of health and premature mortality) in Australia, accounting for 12% of the burden in males and 7% in females (Mathers et al, 1999). Smoking is responsible for the death of an estimated 19,000 Australians each year (Ridolfo and Stevenson, 2001). This is estimated to be 80% of all drug related deaths. About one in two regular smokers dies of a smoking related disease (Lopez et al, 1994). Those who die lose on average 16 years of life (Doll et al, 1994).

Tobacco is a known or probable cause of at least 25 diseases, including lung and other cancers, heart disease, stroke, emphysema and other chronic lung diseases (see Figure 1). People who smoke have higher rates of wound infection following surgical procedures (Peters et al, 2004).

It is important to personalise the health effects of smoking and discuss the issues that are relevant for the smoker and about which s/he is concerned. The risks are not only for the person who smokes, as exposure to environmental tobacco smoke has also been shown to produce increased risk of ischaemic heart disease and lung cancer in non-smokers.

The effects of maternal smoking on the developing foetus and the effects of environmental tobacco smoke exposure on children is a significant cause of morbidity. Women who smoke in pregnancy have a higher rate of miscarriage and complications of pregnancy and labour. The risk of a low birth weight baby is doubled (US Dept of Health and Human Services, 1981). The National Health and Medical Research Council (1997) estimates that in Australia one-quarter of low birth weight is attributable to maternal smoking during pregnancy. Children exposed to maternal smoking in utero have a higher risk of Sudden Infant Death Syndrome (SIDS) as do infants exposed to environmental tobacco smoke after birth. Children of smoking parents also have higher rates of respiratory and middle ear infections, asthma and meningococcal infections.

**Figure 1: Health effects of smoking (from the Smokescreen Program)**



**Smoking during pregnancy**

Increased risk of:

- Miscarriage
- Premature birth
- Low birthweight infant.

**Environmental tobacco smoke**

**In children increased risk of:**

- Respiratory infections such as bronchiolitis
- Middle ear infection
- Meningococcal infections
- Asthma attacks
- Sudden infant death syndrome (cot death)

**In adults increased risk of:**

- Lung cancer
- Heart disease.

## 3. Smoking and Health

### Health benefits of cessation

Nearly all smokers are aware that smoking is damaging their health but may have fairly limited knowledge about the diversity of adverse effects. They are not all aware that most of the adverse health effects from smoking decline rapidly after quitting.

#### **12 hours**

- almost all the nicotine has been metabolised

#### **24 hours**

- blood levels of carbon monoxide have dropped dramatically

#### **5 days**

- most nicotine by-products have been removed
- sense of taste and smell improve

#### **6 weeks**

- risk of wound infection after surgery substantially reduced

#### **3 months**

- cilia begin to recover and lung function improves

#### **1 year**

- risk of coronary heart disease is halved after one year compared to continuing smokers

#### **10 years**

- risk of lung cancer is less than half that of a continuing smoker and continues to decline

#### **15 years**

- risk of coronary heart disease the same as a non-smoker
- 10 to 15 years after quitting the all-cause mortality in former smokers declines to the same level as people who have never smoked.

#### **Other benefits**

- Women who quit before or in the early months of pregnancy have the same risk of having a low birthweight baby as women who have never smoked
- Stopping smoking slows the rate of loss of lung capacity in chronic airways disease
- Improved appearance of skin and fitness
- Saves money – based on one \$10 pack of cigarettes per day in 1 year the cost is \$3,650 and over 5 years \$18,250.

## 4. Role of General Practice in Smoking Cessation

### Evidence of efficacy of advice from health professionals

General practice can make a significant difference in smoking cessation because:

1. Opportunity: 80% of Australians visit their GP at least once per year and most smokers have several visits (Mullins et al, 1999).
2. Credible/expectation/acceptable: Patients see GPs as having a key and supportive role in smoking cessation (Richmond et al, 1993, 1999).
3. Feasible: Advice can take less than one minute (Fiore et al, 2000).
4. Effective: Brief, repeated, non-judgmental advice works (Silagy et al, 2003).
5. Efficient: Smoking cessation is both do-able and worthwhile (RACGP, 1998).

There is evidence that advice from health professionals is effective in encouraging smoking cessation. The Cochrane review (Silagy et al, 2003) examined evidence from 34 trials involving approximately 27,000 smokers. The most common setting for advice was primary care. The pooled data from 16 trials of brief advice versus no advice (or usual care) revealed a small but significant increase in the odds of quitting at six months (odds ratio 1.69, 95% confidence interval 1.45 to 1.98). This equates to an absolute difference in the cessation rate of about 2.5% or one extra quitter for every 40 patients provided brief advice. In epidemiology this is termed the number needed to treat (NNT) and describes the number of patients who need to be given an intervention to result in one patient with the desired outcome. The major effect of advice from health professionals is to motivate a quit attempt (3-5 fold increase). It is important to remember that combining brief advice with other effective interventions such as pharmacotherapy can considerably reduce the NNT.

The potential for health benefit for the population from smoking cessation programs is considerable and compares favourably to other programs. Ward and Young (1999) calculated that achievable scenarios for tobacco control would regain more potential years of life lost due to cancer deaths than either mammographic screening according to national policies or faecal occult blood testing of both men and women over 50 years for colorectal cancer. Smoking cessation advice is also a cost effective intervention. The British Guidelines on Smoking and their Cost Effectiveness (Raw, 1998) found the cost of smoking cessation interventions per life year gained ranged from \$500 to \$2000 per life year gained. In comparison a review of over 310 medical interventions found the median societal cost was \$40,000 per life year gained (Tengs, et al 1995).

In the Cochrane review (Silagy et al, 2003) minimal advice was defined as smoking cessation advice provided during a single consultation lasting less than 20 minutes plus up to one follow-up visit. In the direct comparison of intensive versus minimal advice in thirteen trials there was a small but significant advantage of more intensive advice (OR 1.44, 95% CI 1.23, 1.68). In the meta-analysis for the US Clinical Practice Guideline (Fiore et al, 2000), minimal duration counselling (up to three minutes) was found to result in an abstinence rate of 13.4% at six months (2.5% higher than controls); low intensity (3-10 minutes) in an abstinence rate of 16.0% (5% higher than controls); and higher intensity (more than 10 minutes) in an abstinence rate of 22.1% (11% higher than controls).

## 4. Role of General Practice in Smoking Cessation

The Smokescreen Program demonstrated how highly effective GP advice can be. In the first Smokescreen study involving three interested GPs the quit rate in the intervention group was 36% and 8% in the control group at three years follow-up (Richmond et al. 1986) while in a subsequent study rates with nicotine gum at one year were 19% from Smokescreen and 12% for brief advice (Richmond et al, 1993). These results contrast with the relatively low success rate when people stop smoking without assistance. In the United States the abstinence rate at one year for smokers making an unaided quit attempt is estimated to be about 7% (Fiore et al, 2000).

### **Evidence**

Smoking cessation advice from health professionals is effective in increasing quit rates. The major effect is to help motivate a quit attempt. Level I

All health professionals can be effective in providing smoking cessation advice. Level I

### **Recommendation**

All smokers should be offered brief advice to quit. Strength A

### Making smoking cessation part of your practice

Time is a limited commodity in general practice so the practice needs to be organised to make best use of this precious resource. In the GP consultation where the presenting complaint also needs to be addressed there may be as little as 30-60 seconds of 'disposable time' that the GP can have available to address issues of prevention. There is therefore a need to provide assistance that does not require much GP time. This means having information on important disease risk factors such as smoking available in the practice. Patients spend 10-15 minutes on average waiting to see their GP. Health promotion information can be conveyed in this time by a well-organised noticeboard and patient education materials. Brief information-gathering questionnaires can also be used to collect information on behavioural risk factors such as smoking. A system needs to be instituted in the practice for ordering and restocking preventive resources so that these are reliably available to patients in the waiting room and in the consulting room. A member of the practice staff can have the role of coordinating preventive activities and the roles and responsibilities of other staff can be defined as well as training needs identified. More extensive discussion of this process is in the RACGP publication *Putting prevention into practice* (1998).

Establishing systems for supporting preventive activities at practice, Divisions and other levels of the health system is the major focus of the Smoking, Nutrition, Alcohol and Physical activity (SNAP) Framework. Systems in the practice include staff roles and skills and also record systems whether paper based or computerised. A practice policy of identifying the smoking status of all patients in the practice can motivate quit attempts and increase quit rates (abstinence rate 6.4%, 95%

CI 1.3 – 11.6) by flagging the importance of the smoking to the patients and can prompt the patient to seek help from the GP (Fiore et al, 2000). Increasingly GP software providers are building identification and support systems for preventive activities into their products. These can have a role in assisting identification of risks such as smoking, under or over nutrition, excessive alcohol and insufficient physical activity. They can also be used as tools for recall and reminder.

The GP needs to identify smokers and assess what level of assistance s/he will provide personally, what can be provided by other members of the practice staff and what assistance can be provided by support services such as the Quitline or others in the local community. As part of this process the GP needs to consider the patient's motivation to quit at that time in their life, the GP's own interest and skills in providing assistance and the availability of other assistance either within or outside the practice.

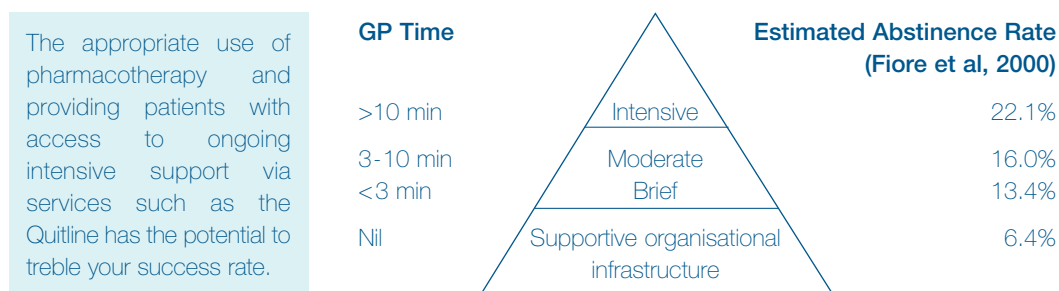
**As a minimum all smokers should be offered minimal advice, information (e.g. a Quit Pack) and the option of referral to a support service (Quitline 131 848).**

More extensive GP time and effort can be directed to those patients who are both motivated to quit and willing to accept assistance from their GP. This will be a relatively small number of the smokers attending the practice at any one time.

The reality pyramid should help with your discussions. It illustrates a number of different points:

- Supportive organisational infrastructure is the foundation on which GP advice is built.
- Providing supportive organisational infrastructure alone, i.e. Quit materials in the waiting room and routinely identifying smokers in the practice, does make a significant difference.
- Brief advice increases that effect, and the more time spent, the better the outcomes.

**Figure 2: Reality pyramid (from GPs Assisting Smokers Program (GASP))**



The appropriate use of pharmacotherapy and providing patients with access to ongoing intensive support via services such as the Quitline has the potential to treble your success rate.



## 4. Role of General Practice in Smoking Cessation

The GP also needs to identify those smokers with complex needs who will require coordinated assistance. Examples are:

- Patients with mental health problems such as depression and schizophrenia
- Pregnant women
- People with smoking related disease such as COPD.

### Links to other preventive activities

Smoking can also co-exist with other risk factors, especially those for cardiovascular disease e.g. diabetes, hypertension and elevated lipids. The RACGP publication Guidelines for preventive activities in general practice (2002) provides information on the evidence and recommendations for activities in relation to these and other preventive activities. The RACGP publication Smoking, Nutrition, Alcohol and Physical activity (Draft May 2004) focuses on behavioural risk factors that are major causes of cardiovascular disease and type 2 diabetes. A multi disciplinary care plan such as an Enhanced Primary Care (EPC) Plan focussed on prevention can be a means of coordinating the assistance needed for such complex patients (see example in the SNAP guide). Patients who smoke and have other medical problems such as mental illness, other drug dependence problems, vascular disease or diabetes need planned multidisciplinary care and therefore be suitable for an EPC plan. Quitline counsellors and community pharmacists could be part of the multidisciplinary team where the Quitline counsellor can provide feedback to the GPs and where the pharmacist takes a role that extends beyond dispensing, e.g. supporting the GP's counselling and providing feedback on progress.

## Referral options

The Quitline (131 848) in each state or territory can provide a Quit Pack and over the telephone counselling assistance. The cost is of a local call from both rural and metropolitan areas and the Quitlines can provide counsellors for a range of languages. In some states (Victoria, South Australia and New South Wales) smokers can be offered pro-active telephone counselling. This means that the smoker agrees to be telephoned by a counsellor over the course of their quit attempt rather than the telephone call being only at the instigation of the smoker. Pro-active telephone counselling has been shown to be more effective than reactive counselling (Borland et al, 2001). A specifically tailored callback service for pregnant smokers is available in Victoria. The smoking guidelines materials contain a **GP referral to Quitline** form that can be used to encourage the patient to make use of the Quitline service and to provide helpful information to the Quitline about the patient and what ongoing support is being provided from general practice. On receiving this form the state or territory Quitline will contact the patient and discuss what telephone support can be provided.

Access to support is also available as an adjunct to some forms of pharmacotherapy. Support services funded by the pharmaceutical manufacturers vary but can include mail-out written materials, access to telephone counselling and/or other modalities such as mobile telephone text messaging. Community based smoking cessation support programs vary from region to region. The Quitline can provide information on quit courses and local organisations that provide individual help and counselling. Your local community health centre may also be able to provide information on cessation courses or support groups.

## 5. The 5As Guideline for Smoking Cessation in Australian General Practice

The 5As are an evidence-based framework for structuring smoking cessation in health care settings. The 5As described below are an adaptation of the 5As for brief intervention of the US Treating Tobacco Use and Dependence clinical practice guideline (Fiore et al, 2000). The 5As for smoking cessation in Australian General Practice are Ask, Assess, Advise, Assist and Arrange follow-up. The intervention approach for each group of smokers is from the Smokescreen Program (Richmond et al, 1986; 1991; 1996; Mendelsohn and Richmond, 1994; Richmond, 1999).

### Ask

In the course of identifying a smoker, asking is the first step. Unfortunately there is evidence that health professionals including doctors and nurses do not always identify smokers or advise quitting. Australian doctors identify two-thirds of their patients who smoke but advise only half of these to quit (Young and Ward, 2001; Wiggers and Sanson-Fisher, 1997).

If smoking status is unknown all patients should be asked and smoking status documented from age 16. Instituting a system to identify smoking status has been shown to be effective in prompting quit attempts and increasing quit rates (Fiore et al, 2000). Smoking status should be identified from age 10 where appropriate. Examples of appropriate times to ask patients aged 10 to 16 are when smoking is relevant to the presenting complaint (e.g. respiratory presentations such as asthma, presenting for meningococcal vaccination) and during discussions about drug use issues.

Ask: "Do you smoke?" and "Have you ever smoked?" Once the current smoker is identified the GP or practice nurse can take a brief smoking history as follows:

- Number of cigarettes smoked per day or per week and the year of starting smoking.
- Previous quit attempts and what happened.
- Presence of smoking related disease.

Smoking status should be documented as current smoker, ex-smoker or never smoked. For current smokers the frequency should be categorised as daily, weekly or irregular. The amount (number per day) and year of commencement of smoking should also be documented. For ex-smokers the quit date should be recorded. Use an electronic or paper-based records system to assist in achieving systematic identification of smokers. In both the Smokescreen and GASP programs stickers are used to identify smokers on the paper record.

#### **Evidence**

Instituting a system designed to identify and document tobacco use almost doubles the rate of clinician intervention and results in higher rates of cessation. Level II

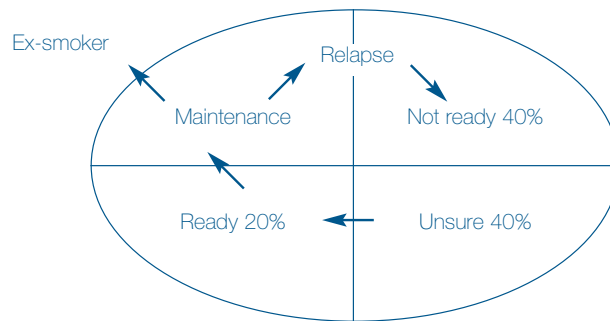
#### **Recommendation**

A system for identifying all smokers and documenting tobacco use should be used in every practice. Strength A.

**Assessing a person's readiness to change**

The Stages of Readiness to Change Model is a valuable model for assessing a person's readiness to change a variety of behaviours. American psychologists, Prochaska and DiClemente (1983), originally developed the model and applied it to smoking cessation. Cessation is explained as a process, rather than a single discrete event and smokers cycle through the stages of being ready, quitting and relapsing on an average of three to four times, before achieving long term success. Smokers will be in different stages of readiness when the clinician sees them at different times, so readiness needs to be constantly re-evaluated.

**Figure 3 : Stages of readiness to stop smoking (from the Smokescreen Program)**



In a study in Australian general practice the proportion of smokers in each Stage of Change were 37% Not Ready, 42% Unsure and 21% Ready to quit (Zwar et al, 2001). This is similar to large studies in the United States involving 18,500 smokers that found 40% of smokers are Not Ready, 40% are Unsure, and 20% are in the Ready group (Velicer et al, 1995). Percentages are the same for male and female smokers and for all ages, but vary with educational level (people with lower educational levels of achievement are more likely to be Not Ready or Unsure). The different readiness to quit groups used in the Smokescreen Program are described as follows (Richmond et al, 1991 and 1997):

**Not ready (Precontemplation)**

These smokers are not seriously considering quitting in the next 6 months. They generally see the positive aspects of smoking and do not like to acknowledge the disadvantages or have been discouraged by failure in past quit attempts. Pros of smoking outweigh the cons, and therefore change at this time is unlikely.

**Unsure (Contemplation)**

These smokers are seriously considering quitting in the next 6 months. They are ambivalent or uncertain about their smoking and are thinking about changing their behaviour. This group is particularly amenable to brief motivational interviewing.

## 5. The 5As Guideline for Smoking Cessation in Australian General Practice

### Ready (Preparation)

These smokers are planning to quit in the next 30 days and have usually made a 24-hour quit attempt in the past year. This group is motivated to quit soon and is the group most likely to actually attempt to quit in the near future. This is a window of opportunity, which may only open for a short time, and is the group most likely to ask for help with quitting.

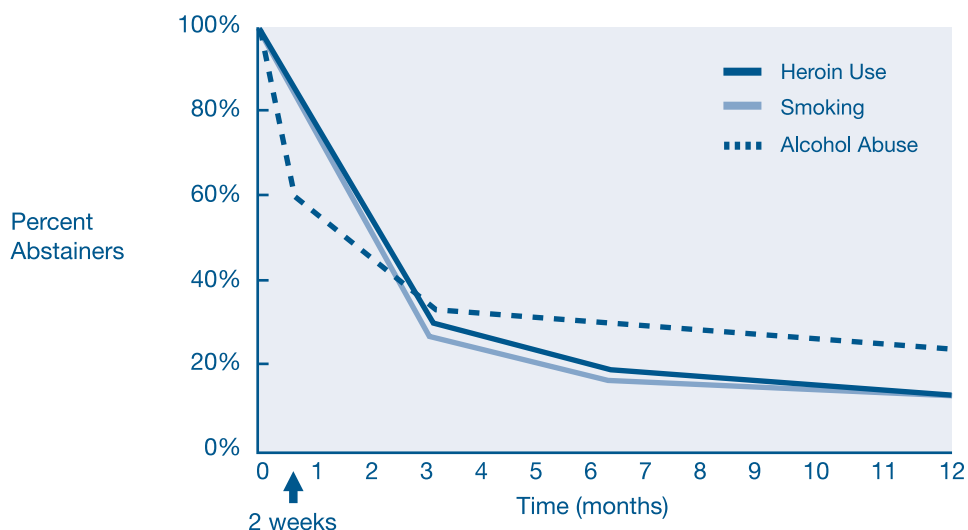
### Action

These are former smokers who have quit in the last 6 months. This is when the risk of relapse is highest with about 75% of relapse occurring in this stage, most within the first week (National Health Committee, 1999). The new ex-smoker is trying to lose his/her associations and triggers for smoking and establish him/herself as a non-smoker. This is a period where support and strategies to prevent relapse are especially important (see relapse prevention). If relapse does occur it is important that this is not seen as a failure but a learning experience and a not uncommon part of the quitting process.

### Maintenance

These are smokers who quit over 6 months ago. The non-smoking behaviour is established and the threat of smoking gradually diminishes. The chances of relapse diminish over time – only about 4% of those who quit for more than two years ever go back to smoking.

Figure 4: Smoking relapse rate over time – for heroin use, smoking and alcohol abuse



Ref: U.S. Department of Health and Human Services. The Health Consequences of Smoking, Nicotine Addiction. A Report of the Surgeon General. DHHS Publication No. (CDC) 88-8406, 1988

### **Important issues in relation to the Stages of Change Model**

Distinguish smokers thinking they should quit from readiness to quit. There are 80-90% of smokers who think they should quit, but only 20% are actually committed to quitting now. The difficulty of quitting smoking, in the context of physical and psychosocial dependence, needs to be acknowledged.

All groups can be helped, but each group requires a different and targeted intervention with a different aim. Being patient-centred and non-judgmental is useful in all approaches.

Redefine success. Success is defined as movement through the model, not just quitting. Every time you help someone move one stage, you double his/her chance of success 2 years later. Change may be delayed and not apparent in the short term. Motivation to change can also change over short periods so windows of opportunities to assist can occur and flagging motivation can need to be 'shored up'.

Choosing an effective approach: more time is spent on those people most likely to benefit and most interested in getting some help. The clinician is also spared the frustration of failure in trying to help those who are "Not Ready" to quit and the risk of generating resistance is lessened. Interventions targeted to the stage of change are also more likely to be effective.

Relapse is a normal part of the quitting process. Most successful ex-smokers make 3-4 serious quit attempts before finally breaking their habit.

### **Key questions**

Stage of change can be assessed using a non-judgmental question (Richmond et al, 1997). The key question from the Smokescreen Program to facilitate assessment is **"How do you feel about your smoking at the moment?"** Where needed, clarify the response by asking the patient whether they are willing to make a quit attempt at this time or in the near future (e.g. the next 30 days). For example ask **"Are you ready to quit now?"** It is important to express concern/interest, and not criticism, when assessing.

Assessment also includes examining barriers to quitting, triggers for smoking (e.g. social situations, stress, negative emotions), social support and the smoker's experiences in previous quit attempts. Assessing previous use of pharmacotherapy is helpful to determine if it was used optimally and what problems occurred. The implications of other health issues and problems such as mental illness, other physical health problems, and pregnancy also need to be assessed, as the smoker may need the input of other services to address these.

### **Evidence**

Factors consistently associated with higher abstinence rates are high motivation, readiness to quit, moderate to high self-efficacy and supportive social networks. Level III

### **Recommendation**

Assessment of readiness to quit is a valuable step in planning treatment. Strength B

## 5. The 5As Guideline for Smoking Cessation in Australian General Practice

### Assessing nicotine dependence

Nicotine is the component of cigarette smoke responsible for drug dependence but is not the component responsible for the harmful health effects of smoking. Nicotine acts as an agonist at ganglionic cholinergic receptors in both the peripheral and central nervous system and causes the release of a number of neuro-transmitters including dopamine, noradrenaline, acetylcholine and serotonin.

Nicotine affects the:

- Central nervous system – a range of short term effects including pleasure, arousal, improved short term memory, improved concentration and decreased anxiety
- Cardiovascular system – increased heart rate and blood pressure and peripheral vasoconstriction
- Endocrine system – increased circulating catecholamines such as adrenaline and noradrenalin and increased cortisol levels
- Metabolic system – increased basal metabolic rate
- Gastrointestinal system – decreased appetite, nausea
- Skeletal muscle – decreased tone.

Nicotine is readily absorbed from the respiratory tract, buccal mucosa and skin. There is minimal absorption through the gastrointestinal tract when administered orally. Cigarettes are a highly effective mechanism for delivering nicotine. Inhaled nicotine takes about 10-19 seconds to reach the brain when administered through the pulmonary circulation. As nicotine is rapidly and extensively metabolised, primarily in the liver (average half life 2 hours) the smoker has a number of peaks and troughs of nicotine through the day (NSW Health Department, 2002). This has the effect of promoting addiction as the smoker experiences early withdrawal effects such as craving and irritability when nicotine levels decrease.

Assessment of nicotine dependence will help predict whether the smoker is likely to experience nicotine withdrawal on stopping smoking. The American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) states that nicotine dependence and withdrawal can develop with all forms of tobacco. Features of nicotine dependence include: smoking soon after waking, smoking when ill, difficulty refraining from smoking, reporting the first cigarette of the day to be the most difficult to give up and smoking more in the morning than in the afternoon.

The modified Fagerström Test for Nicotine Dependence can be used to assess nicotine dependence (Fagerström, 1990).

### Fagerström Test for Nicotine Dependence

Questions	Answers	Score
1. How soon after waking up do you smoke your first cigarette?	Within 5 minutes	3
	6-30 minutes	2
	31-60 minutes	1
2. Do you find it difficult to abstain from smoking in places where it is forbidden?	Yes	1
	No	0
3. Which cigarette would you hate to give up?	The first one in the morning	1
	Any other	0
4. How many cigarettes a day do you smoke?	10 or less	0
	11-20	1
	21-30	2
	31 or more	3
5. Do you smoke more frequently in the morning than in the rest of the day?	Yes	1
	No	0
6. Do you smoke even though you are sick in bed for most of the day?	Yes	1
	No	0

Score: 0-2 very low dependence  
3-4 low dependence  
5 medium dependence  
6-7 high dependence  
8+ very high dependence

As a more rapid and practical alternative nicotine dependence can be assessed by asking about:

1. Minutes after waking to first cigarette
2. Number of cigarettes per day
3. Cravings and withdrawal symptoms in previous quit attempts.

Smoking within 30 minutes of waking, smoking more than 15 cigarettes per day and history of withdrawal symptoms in previous quit attempts are all indicators of nicotine dependence.

Patients who have had withdrawal on previous quit attempts may be expected to experience it again in subsequent attempts.



## 5. The 5As Guideline for Smoking Cessation in Australian General Practice

The DSM-IV criteria for nicotine withdrawal are shown below.

- Craving +**
- Four of the following**
- depressed mood
  - insomnia
  - irritability, frustration, anger
  - anxiety
  - difficulty in concentration
  - restlessness
  - decreased heart rate
  - increased appetite or weight gain.

To meet the diagnostic criteria for nicotine withdrawal the following must also apply: the symptoms cause clinically significant distress, are not due to a general medical condition and are not accounted for by another medical disorder. Nicotine withdrawal symptoms typically resolve over 10 to 14 days but can last up to 4 weeks and associations that cause the person to think about smoking can persist for years.

### Advise

All smokers should be firmly advised to quit in a way that is:

- Clear and unambiguous
- Supportive and non-confrontational.

Examples of words that can be used are “While I respect that it is your decision, as your doctor, I strongly suggest you stop smoking.” Or “Stopping smoking is the most important thing you can do to protect your health now and in the future,” and/or “Cutting down while you are ill is not enough.” There is evidence from qualitative research that advising smokers repeatedly that they should quit, especially in consultations unrelated to smoking, can damage patient-doctor rapport (Butler et al, 1999). To avoid this, Butler and Rollnick (2002) emphasise the importance of establishing rapport in the consultation and asking permission to discuss the subject of smoking.

Where possible personalise the benefits of cessation. Examples are improvement in other illnesses, importance of smoking as a risk factor for future illness, not exposing others (including children) to environmental smoke, importance as a role model to children and adolescents, and saving money.

All smokers should be offered information such as a Quit Pack and the option of referral to a support service (Quitline). Quitlines are increasingly developing expertise in helping the Not Ready smoker to explore their options. They are not pushing the unwilling into trying to quit.

**Evidence**

Brief smoking cessation advice from doctors delivered opportunistically during routine consultations has a modest effect size but substantial potential public health benefit. Level I

**Recommendation**

Offer brief cessation advice in routine consultations whenever possible (at least annually) Strength A

## Assist

Provide targeted assistance based on the assessment process described above. Assistance can have a variable level of GP involvement as follows:

- Minimal advice and provide written information and option of referral to support service (Quitline),
- General practice based assistance (by GP or skilled practice staff),
- General practice based assistance plus coordination of assistance from other services.

Examples of the types of services that may be involved are medical specialists, mental health services, cardiac rehabilitation, antenatal clinic, diabetes educator, asthma educator, pulmonary rehabilitation, Quitline counsellors (where they are able to provide feedback to the GP) and community pharmacists (where their role extends beyond dispensing).

The decision on what mix of assistance will be provided (inside and outside the practice) will depend on the needs and preference of the patient and the capacity of the practice to provide a general practice based service.

**Minimal advice and referral**

Minimal assistance involves providing:

- Brief advice to quit (as under Advise)
- Written information such as a Quit Pack or other suitable materials (e.g. patient education materials available from desktop software)
- Offer referral to the Quitline or appropriate community service,
- Advice on pharmacotherapy as appropriate.

Quit Packs and referral resources are provided with the guideline materials along with re-order forms for further supplies.

## 5. The 5As Guideline for Smoking Cessation in Australian General Practice

### General practice based assistance

Provide assistance based on stage of readiness to change, barriers to quitting and other issues. The approach below is based on the Smokescreen Program, which has been extensively evaluated in general practice in Australia (Richmond et al, 1986 and 1993, Richmond 1999).

### Not ready to quit (Pre contemplation stage)

- Point out the relevance of smoking for current and future health
- Encourage the patient to think about his or her smoking
- Offer an open invitation of further help from general practice and/or
- Offer written information such as Quit Pack
- Offer option of referral to a support service (Quitline 131 848).

### Unsure about quitting (contemplation stage)

- Help the patient to reflect on their smoking behaviour using motivational interviewing (see below)
- Explore relevant health effects of smoking and barriers to cessation
- Explore other physical or mental health issues of relevance
- Offer further help from general practice and/or
- Provide written information such as Quit Pack
- Offer option of referral to a support service (Quitline 131 848).

### Ready to quit (action stage)

- Affirm and encourage the decision to quit
- Help the patient to develop a quit plan including:
  - Selecting a quit date ideally within the next two weeks
  - Assist with dealing with barriers to quitting such as fear of failure, coping with stress, concern about weight gain, social and cultural environment
  - Cognitive and behavioural strategies (see pages 25 and 28-29)
  - Social support
  - Assist with implications of complicating issues such as mental or physical health problems, social environment, pregnancy.
  - Assist with advice on NRT or prescribe bupropion as indicated (see pages 32-40). Arrange follow-up to monitor medication effects within one week after quit date for NRT or on quit day for bupropion.
  - Offer further help from practice and/or information (e.g. Quit Pack) and option of referral to support service (Quitline 131 848)

### Motivational interviewing

Motivational interviewing is a counselling technique based on a therapeutic partnership that acknowledges and explores a patient's ambivalence about a behaviour. Motivational interviewing involves open-ended questions, reflective listening and summarising. The clinician is responsible for the process of motivational interviewing but allows the patient to take responsibility for making a decision about quitting. Motivational interviewing should avoid confrontation that can damage rapport with the patient and generate resistance to change. As well as ambivalence, motivational interviewing can also explore discrepancy between their smoking and personal goals such as health, fitness, improved appearance and saving money.

Smokers who are unsure about quitting can be motivated to change by:

1. Helping them to weigh up the pros and cons of smoking. The patient can also be asked to rate their motivation and confidence in quitting.
2. Discussion of relevant health issues and concerns about quitting (see health effects of smoking).

### Weighing up the pros and cons of smoking

1. Ask: What do you like about smoking?
2. Ask: What are the things you don't like about smoking?
3. Summarise your understanding of the patient's pros and cons.
4. Ask: Where does this leave you now?

As a take home exercise patients can be asked to think about and list their likes and dislikes about smoking and about quitting.

	Like	Dislike
Smoking		
Quitting		

### Assessing motivation and confidence

Asking patients to rate their motivation and confidence in quitting on a scale of 1 to 10 can be a helpful addition to brief motivational interviewing. Distinguishing motivation and confidence can provide an insight into the barriers to quitting and can be used to initiate a discussion on how to enhance motivation or confidence (Rollnick and Butler, 1997).

### Guiding principles for motivational interviewing

Miller and Rollnick (2002) have summarised four general principles of motivational interviewing:

1. Express empathy
2. Develop discrepancy
3. Roll with resistance
4. Support self-efficacy.

Other suggestions are:

- Personalise the intervention. Provide advice according to the smoker's needs and concerns and the time available e.g. weight gain, stress, withdrawal symptoms.
- Be non-confrontational and non-judgmental. Avoid arguing as this generates resistance to change.
- Be positive. Emphasise the positive aspects of quitting, e.g. improvement in health and wellbeing, rather than using scare tactics. Slips and relapses are not failures, but rather they are learning experiences. Give praise and encouragement when deserved.
- Use discrepancy. Cognitive dissonance is where patients hold conflicting views at the same time which generates affective discomfort and helps them to re-look at their motives and beliefs. Use strategies like: likes and dislikes; what will happen in the future if you continue to smoke?; what will happen if you quit?

## 5. The 5As Guideline for Smoking Cessation in Australian General Practice

### Recent quitter (last 12 months)

- Congratulate
- Review and reinforce benefits of being a non-smoker
- Assist with relapse prevention strategies. These include:
  - Expressing interest and concern in assisting them to remain an ex-smoker
  - Helping the patient to identify high-risk situations such as drinking alcohol, emotional stress, and social situations with smokers
  - Help plan coping strategies and address barriers to quitting (see below)
- Offer further help from practice and/or information (e.g. Quit Pack) or referral (e.g. Quitline 131 848).

### General practice based assistance plus coordination of assistance from other services

Assist according to stage of readiness to change as detailed above in General Practice based assistance plus coordinate assistance from other services.

Assess implications of mental and/or physical health problems for quit attempt. Refer to or liaise with specialised services where available e.g. psychiatrist and/or mental health case worker, specialist physician, cardiac rehabilitation, diabetes educator, pulmonary rehabilitation. Consider developing or contributing to Enhanced Primary Care (EPC) multidisciplinary care plan. This may include contribution from Quitline where they have the capacity to be part of coordinated care.

## Barriers to quitting

Concerns or barriers to quitting are important for all smokers. An informed discussion can be very helpful to assist smokers to overcome these, by providing information and correcting misconceptions. The common barriers to quitting are discussed below.

### Withdrawal symptoms

More than 80% of smokers will experience symptoms of nicotine withdrawal. Cravings for cigarettes and irritability are two of the most common symptoms. Withdrawal symptoms may be lessened or prevented by using NRT or bupropion. If people are not using pharmacotherapy then cognitive and behavioural strategies can be used to assist in the early stage of the quit attempt. The worst of the physical symptoms are over within 2-3 days and most have passed after 10 – 14 days but can last up to 4 weeks. If withdrawal symptoms persist longer than this then they should seek advice. If withdrawal symptoms are severe or prolonged in people using NRT or bupropion then an increase in dosage of NRT should be considered.

### **Stress**

Smokers often use their cigarettes to help them cope with stress. Nicotine has been shown to have a direct relaxing effect on the brain as well as having stimulant effects. However, some of the relaxing effect of smoking is the break from the stressful activity that goes with it and the deep breathing. Smokers may benefit from exploring other ways of coping with stress and learning to relax such as progressive muscle relaxation and breathing techniques. These may be taught by the GP or via a relaxation tape such as the one available from Quit Victoria.

### **Fear of failure**

Relapse is a common feature of the quitting process and most smokers have tried and relapsed 3-4 times before finally becoming successful ex-smokers. Smokers should be encouraged to view each attempt at cessation as a learning experience (not a failure) that increases the chances of success next time. It is important to find out why they relapsed and explore ways of coping with that situation in future. Coping strategies for high-risk situations should be discussed. Smokers should be encouraged to try again until they finally succeed. Other suggestions for increasing the chances of success at the next quit attempt are to consider pharmacotherapy and use of support services such as the Quitline.

### **Peer/social pressure**

High-risk situations such as social situations with alcohol are often strongly associated with smoking. Avoidance of these situations early in the quit attempt can be suggested. For some patients, it can be helpful to rehearse how to say no to a cigarette offer. In the first few weeks of a quit attempt patients should be encouraged to spend more time with non-smokers, go to non-smoking sections in clubs or spend more time in places where smoking is forbidden.

### **Weight gain**

This is a very important barrier, especially for women. It is often an issue in relapse and even initiation of smoking. Mechanisms of weight gain include the return to a normal metabolic rate after cessation of nicotine intake and increased food intake. Weight gain affects about 75% of those who stop smoking. The average weight gain is 2-4kg in weight and about 10% of people experience major weight gain (>13kg). Weight gain is delayed while people are taking either Nicotine Replacement Therapy or bupropion (Fiore, 2002). Advice to reduce weight gain includes: a balanced low fat diet and avoidance of high-fat foods, drinking water or low-calorie drinks as a substitute to snacking, regular exercise, and identifying eating triggers and learning new ways to cope with them. Consider referral to a dietician for expert advice on healthy, low fat eating.

## 5. The 5As Guideline for Smoking Cessation in Australian General Practice

### Cognitive and behavioural strategies to assist cessation

#### Cognitive strategies

Some patients can benefit from keeping a smoking diary for one or several days leading up to the Quit Day as this helps to make them more aware of their smoking pattern. It can help pinpoint the main smoking triggers and high-risk smoking situations, and assist in developing alternatives and substitute activities. For example, a smoker may identify their morning cup of coffee as a trigger for wanting a cigarette. Deciding to drink juice or even tea instead may be enough to remove this trigger and start to break down the mental association.

Cognitive or thinking strategies aim to use the power of logical thought to help overcome the addiction to smoking. Smokers can be encouraged to consider the benefits of quitting and the consequences of starting to smoke again. The perceived benefits of smoking can be challenged. Many smokers strongly believe they cannot cope with their stress without cigarettes but in fact when they stop, they find they can cope just as well, or even better than when they were smoking. Other perceived benefits are smoking as a means of controlling weight, as a reward system and as a way of regulating mood. Smokers have a relationship with their cigarettes built up over many years. Saying farewell to this lifetime habit takes time and effort (Richmond and Harris, 1999). Cognitive strategies can help the ex-smoker cope with cravings. Thought stopping involves a conscious decision not to think about smoking and thought substitution is deciding to think about something else.

#### Behavioural strategies

A number of behavioural strategies can be suggested to cope with the triggers and high-risk situations. Ideally, the patient should suggest his/her own alternatives and substitute activities. The **4Ds** are an easy to remember mnemonic from Quit about behavioural coping strategies:

**Delay** acting on the urge to smoke. After five minutes the urge to smoke weakens and your resolve to quit will come back.

**Deep breathe.** Take a long slow breath in and slowly release it out again. Repeat three times.

**Drink** water slowly holding it in your mouth a little longer to savour the taste.

**Do something else** to take your mind off smoking. Doing some exercise is a good alternative.

The Smokescreen Program also suggests the strategies of delay and distraction. Another suggestion from the Smokescreen Program (Mendelsohn and Richmond, 1994) is to avoid major triggers for smoking early in the quit attempt. Common triggers are alcohol, coffee and smoking friends. Drinking no or less alcohol in the short term is often helpful as alcohol can undermine motivation. Smokescreen also suggests modifying situations where there is an environmental cue (e.g. take the ashtray out of the car) and as a last resort the strategy of escape from situations where there is pressure to smoke. Social support for quitting from family and friends is very helpful and the GP can explore the extent to which this is available. Where social support is lacking the GP can try to offer support and/or suggest the patient makes use of the Quitline.

Patients can be asked to remember that just one will hurt. Thinking "I can have just one" can lead to a return to regular smoking.

## Arrange follow-up

### **Evidence**

Follow-up is effective in increasing quit rates. Level I

### **Recommendations**

All smokers attempting to quit should be offered follow-up. Strength A

Follow-up visits after advice to quit has been shown to increase the likelihood of successful long-term abstinence (Richmond et al, 1986 and 1993). If the patient has been referred for assistance with quitting then the GP can seek feedback from the patient as to progress at subsequent visits. If the patient's quit attempt is being supported from general practice then actively schedule follow-up. A strategy to encourage follow-up visits is making an appointment time for follow-up at the conclusion of the initial consultation. The practice receptionist can be asked to telephone the patient the day before to confirm that the patient will be attending. Suitable times for follow-up visits are within 1 week and at 1 month after quit day. Follow-up can be in person or by telephone.

### **Agenda for one week follow-up visit or telephone call**

If abstinent:

- Congratulate and affirm decision not to smoke, and remind patient of benefits of being a non-smoker
- Review progress and problems
- Assess pharmacotherapy use including adherence, any problems and encourage continuation
- Discuss early relapse prevention – awareness of coping strategies for high-risk situations such as stress, negative emotional states, alcohol, social environment
- Encourage social support and use of support services (Quitline, community based program, services provided in conjunction with pharmacotherapy).



## 5. The 5As Guideline for Smoking Cessation in Australian General Practice

If relapsed:

- Empathise and reframe as a learning experience
- Explore reasons for relapse
- Help build motivation to reach the stage of readiness to try again.

If patient has not made quit attempt:

- Explore reasons for delay
- Encourage patient to set a quit day.

### **Agenda for one month follow-up visit or phone call**

If abstinent:

- Praise and affirm decision
- Review progress and problems
- Encourage completion of full course of pharmacotherapy
- Discuss relapse prevention – remind smokers to not have the first cigarette and therefore avoid the risk of having more.

If relapse does occur reframe as a learning experience (see below). Further follow-up can be tailored to the needs of the patient.

If the smoker has complicating physical or mental health problems or other behavioural risk factors that are also being addressed then these will also need to be dealt with at follow-up visits. Where other health professionals are involved, addressing these more complex needs may be assisted through the use of an EPC multidisciplinary care plan.

## Relapse prevention

Relapse prevention strategies aim to assist people to avoid or cope with high-risk smoking situations. Such strategies also aim to prevent a lapse from occurring or if it occurs from becoming a full relapse to smoking.

Suggested strategies are:

- Identify high-risk smoking situations and important smoking triggers
- Plan coping strategies in advance
- Consider lifestyle changes that may reduce the number of high-risk situations encountered, e.g. stress management, reduction in alcohol consumption
- Encourage patients to have a plan for how to deal with a slip to prevent it becoming a full relapse.

Quitting is a dynamic and continuing process often involving repeated attempts rather than a discrete event. Repeated relapse is a normal part of this process. Most successful ex-smokers have tried and relapsed 4 times on average before finally succeeding (National Health Committee, 1999). There is a high rate of relapse for all methods of smoking cessation.

It is very common for people to have slips or lapses in the course of a quit attempt. A slip or lapse is occasional smoking (no more than one or two cigarettes only), often occurring at times of stress, in social situations and can be accompanied by alcohol. The patient needs to refocus on wanting to quit, regain abstinence and develop strategies to avoid further slips. To help the ex-smoker avoid further slips advice can be provided on cognitive and behavioural strategies such as the 4Ds.

Relapse is a return to regular smoking. The risk of relapse is highest in the first week after a quit attempt (Kenford et al, 1994; Hughes et al, 1994). Seventy-five percent of relapses occur in the first six months. Even after being abstinent for a year, about one-third of ex-smokers may relapse. After two years the probability of relapse decreases to about 4% (National Health Committee, 1999). Relapse can occur because people have not planned how to cope with cravings, do not recognise triggers or decide to 'just have one'. Common triggers for relapse are alcohol and negative emotional states such as interpersonal conflict, anger, frustration and anxiety.

#### **Evidence**

Relapse prevention advice can reduce relapse rate. Level II

All smokers attempting to quit should be offered relapse prevention advice. Strength A

## 6. Pharmacotherapy

### Evidence

Pharmacotherapy with nicotine replacement therapy or bupropion sustained release is an effective aid to assisting motivated smokers to quit. Level I

Compliance with pharmacotherapy, especially duration of use, is an important influence on success rates. Level II

### Recommendation

In the absence of contraindications, pharmacotherapy should be offered to all motivated smokers who have evidence of nicotine dependence. Choice of pharmacotherapy is based on clinical suitability and patient choice. Strength A

Smokers using pharmacotherapy should be encouraged to use it for a sufficient period (8 weeks with NRT and at least 7 weeks with bupropion). Strength A

### Nicotine Replacement Therapy (NRT)

The aim of nicotine replacement therapy (NRT) is to replace some of the nicotine from cigarettes without the harmful constituents found in tobacco smoke. NRT reduces withdrawal symptoms associated with nicotine addiction, allowing the smoker to focus on the psychosocial aspects of quitting smoking. The best results are achieved when combined with behavioural advice and follow-up. In Australia, inhalers and sublingual tablets are available from a pharmacist without prescription and nicotine gum and patches are unscheduled. Another form, nicotine nasal spray, is not available.

Meta-analyses of the evidence on efficacy of NRT have been done by the Cochrane Library (Silagy et al, 2003) and by the US Guidelines Panel (Fiore et al, 2000). Both concluded that NRT is effective. The Cochrane review looked at 65 studies and found an overall odds ratio of 1.71 (95% CI 1.60, 1.82) when comparing cessation rates at 12 months of various forms of NRT to placebo or no treatment. The effect sizes (difference in abstinence rate between intervention and control groups) for different forms of NRT ranged from 5 to 12% but no form was significantly better than another. In the meta-analysis of 47 studies by Fiore et al 2000, the odds ratios ranged from 1.6 to 2.7 and effect sizes from 7 to 17% comparing various forms of NRT to placebo at 6 months follow-up.

A longitudinal study conducted in Australia of the nicotine transdermal patch compared with placebo found that abstinence rates among those with the active patch more than doubled that of placebo at each measurement point, i.e., at 6 months, 1, 2, 3, 7 and 10 years follow-up (Richmond et al, 1997, 2000 and 2002). Meta-analyses of the transdermal nicotine patch reported that active patch users quit smoking at more than double the rate of those who used placebo patches (Silagy et al, 1994; Fiore et al, 1994).

**Evidence**

Nicotine gum, nicotine transdermal patch, nicotine nasal spray and nicotine inhaler all increase quit rates at five to 12 months approximately two-fold compared with placebo and regardless of the setting. Level I

There is no significant difference in the effectiveness of different forms of NRT in achieving cessation at five to 12 months. Level I

**Recommendation**

NRT should be recommended to nicotine dependent smokers. The choice of product depends on practical and personal considerations. Strength A

Plasma nicotine levels have been found to be lower in subjects using NRT than when they were smoking (Hurt et al, 1994). This means that some patients will be under-replaced when on standard doses of NRT leading to persistent withdrawal symptoms that may make relapse to smoking more likely. Smokers using NRT to quit may confuse withdrawal symptoms with nicotine toxicity from the NRT (a rare occurrence). Treatment with NRT has been found to delay the weight gain commonly associated with smoking cessation.

**Nicotine transdermal patch**

The nicotine transdermal patch has the advantage of simplicity of use (Raw, 1998). Use of the 21mg nicotine patch produces blood levels approximately half those of smoking (Benowitz, 1991). There is no difference in effectiveness of 16 hr versus 24 hr patches (Silagy et al, 2003). Eight weeks of patch therapy is as effective as longer courses and there is no evidence that tapered therapy is better than abrupt withdrawal (Fiore et al, 1994; Silagy et al, 2003).

**Nicotine patch-dosing guidelines**

Patient group	Initial dose	Duration
> 10 cigarettes per day and weight > 45kg	21mg/24hr patch or 15mg/16hrs	At least 8 weeks
< 10 cigarettes per day or weight < 45kg or cardiovascular disease	14mg/24 patch or 10mg/16hrs	At least 8 weeks

The durations recommended by the manufacturers are: Nicabate and QuitX 21mg for 6 weeks, 14 mg for 2 weeks, 7mg for 2 weeks; Nicotinell 30cm<sup>2</sup>, 20cm<sup>2</sup>, 10cm<sup>2</sup> – 3 to 4 weeks at each strength; Nicorette 16mg for 12 weeks, 10mg for 2 weeks, 5mg for 2 weeks.

Local effects include transient itching, burning and tingling at the application site, which may affect up to 47% of patch users, but they are usually mild and rarely lead to withdrawal of patch use (Fiore et al, 1992). Skin erythema (redness) can also occur but usually does not persist for more than 24 hours. Hydrocortisone cream (half percent) can be effectively used for this reaction. Allergic contact dermatitis can occur uncommonly (in 2-3% of people) and requires cessation of transdermal

## 6. Pharmacotherapy

therapy. Patients should be instructed to apply the patch to dry non-hairy skin above the waist. Rotating the patch site decreases the likelihood of skin reactions. Sleep disturbance including insomnia and vivid dreams can occur. If sleep disturbance is a problem, the patch can be removed at night. After removal, nicotine absorption continues for up to two hours from nicotine already in the skin.

### Nicotine gum

The blood levels achieved by use of the nicotine chewing gum are 1/3 (2mg) and 2/3 (4mg) those of smoking (McKendree et al, 1982). There is evidence that in more dependent smokers (smoking more than 20 cigarettes per day) 4mg gum results in higher cessation rates than 2 mg gum. Correct chewing technique is important as nicotine is absorbed through the oral mucosa. The patient should be instructed to chew slowly (about 15 chews) until a peppery taste or tingling sensation is noticed. Then park the gum in the cheek or under the tongue for 1-2 minutes or until the taste disappears. Repeat this cycle for 30 minutes.

Recommend the use of at least 8-12 pieces per day initially, or a fixed schedule such as one piece per hour, as the gum is more effective if used regularly. A common problem is the under use of the gum. Three months use is recommended by the manufacturers followed by a period of tapering.

Adverse effects include gastrointestinal disturbances, dyspepsia, nausea, hiccups and occasionally headache if the gum is chewed too rapidly. Other common adverse effects are jaw pain and dental problems (Fiore et al, 1992; Palmer et al, 1992). People who wear dentures cannot use the gum. Dependence on the gum can occur. Though this is not ideal, it is safer than smoking.

#### Evidence

In people smoking more than 20 cigarettes per day 4mg gum is more effective than 2mg gum. Level II

#### Recommendation

If nicotine gum is chosen as the form of NRT then 4mg gum should be suggested for heavy smokers. Strength A

### Nicotine inhaler

This device consists of a plastic mouthpiece and cartridge containing 10mg of nicotine. Though the device is called an inhaler nicotine is absorbed through the oral mucosa, not through the respiratory tract. The inhaler produces nicotine concentrations that are about one-third of those achieved with cigarette smoking. The inhaler is aimed at those smokers who miss the hand to mouth action of smoking. One study that directly compared four of the six NRT products found no difference in abstinence rates or withdrawal discomfort, although compliance was lower for inhaler and nasal spray (Hajek et al, 1999).

The recommended program from the manufacturers is: 6-12 cartridges per day for 12 weeks, 3-6 per day for 2 weeks, 1-3 per day for 2 weeks. The more common side effects include: coughing, headache, heartburn, nausea, hiccups, throat irritation, rhinitis and, occasionally taste disturbance and sinus irritation (Schneider et al, 1996).

### **Nicotine lozenge**

Nicotine lozenges have been available since 2002. In a 12 month follow up study (Shiffman et al, 2002), odds ratios for abstinence for the 2mg dose was 2.10 (95% CI 1.59, 2.79) and for the 4mg dose was 2.69 (95% CI 1.69, 4.29). The choice of dose in this study was based on time of day of first cigarette. If the patient smokes their first cigarette within half an hour of waking then the 4mg dose is suggested. Absorption of nicotine from the lozenge is through the oral mucosa. This form of NRT has advantages for people who prefer an acute onset oral form of replacement but who do not wish to use or have problems with use of nicotine gum.

### **Nicotine sublingual tablet**

This is the most recent addition to the forms of NRT available in Australia. The small sublingual tablet is held under the tongue where it slowly disintegrates within 30 minutes and nicotine is absorbed sublingually. Like the lozenge it has the advantage of not requiring chewing. The levels of nicotine obtained by use of the 2mg sublingual tablet are similar to those from the same dose of gum and lozenge (Molander, 2001). Highly dependent smokers should use two 2mg tablets every 1-2 hours. In a randomised trial (Wallstrom, 2000) there was an approximate doubling of quit rates at six months compared to placebo, which is comparable to other forms of NRT.

## **Higher dose and combination Nicotine Replacement Therapy**

Highly dependent smokers (20 or more cigarettes per day) benefit more from 4mg than 2mg gum and there may be a small benefit of higher dose patches across the range of 15 to 42mg in 16 hour or 24 hour patches (Hughes et al, 1999; Silagy et al, 2003).

Though not approved in the product information for NRT formulations, rapid onset and slower onset nicotine delivery systems have been combined in a number of studies such as the transdermal patch for a steady background nicotine, supplemented by gum for immediate relief of craving (Kornitzer et al, 1995; Puska et al, 1995). A meta-analysis of combination therapies (Fiore et al, 2000) showed that combination therapy almost doubles cessation rates at 12 months compared to one form of therapy. Like other patients on NRT, patients on high-dose and combination therapy should be monitored for symptoms of under or overdosing.

### **Evidence**

In more dependent smokers combinations of different forms of NRT are more effective than one form alone. Level II

### **Recommendation**

Combination NRT should be offered if patients are unable to remain abstinent or continue to experience withdrawal symptoms using one type of therapy. Strength A

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### Safety of Nicotine Replacement Therapy

In the approved product information NRT is contraindicated for some patient groups. For some of these groups such as those who have had a recent myocardial infarct, unstable angina or CVA, clinicians may choose to use the NRT following assessment of the risk balanced against the risk of continued smoking. Advice from a cardiologist can assist the GP in deciding whether to advise NRT. The patient should be informed of the risks and benefits. Recent myocardial infarction is defined in the US Guidelines (Fiore et al, 2000) as within the last two weeks.

**The table below summarises the contraindications as listed in the approved product information.**

Therapy	Contraindicated patient group
Gum	Non-smokers, pregnancy lactation, children (<12 years).
Patch	Non-smokers, acute MI, unstable angina pectoris, severe arrhythmias, recent CVA, skin disease (sensitive to patch therapy), children (<12 years), pregnancy, lactation.
Inhaler (pharmacy only)	Non-smokers, hypersensitivity to menthol, pregnancy, children (<12 years).
Lozenge (pharmacy only)	Non-smokers, phenylketonuria, unstable angina, Prinzmetal angina, severe arrhythmias, recent MI, stroke, pregnancy, lactation, children (<12 years).
Sublingual tablet (pharmacist only)	Non-smokers, recent MI, unstable angina, severe arrhythmia, stroke in acute phase, pregnancy, children.

#### Evidence

There is no evidence of increased risk for use of NRT in people with stable cardiovascular disease (Benowitz, 1997). Level II

Several studies have documented the lack of an association between the nicotine patch and acute cardiac events (Gourlay and Benowitz, 1997; Joseph et al 1996). Level II

#### Recommendation

NRT can be used safely in patients with stable cardiovascular disease. Strength A

NRT should be used with caution in recent MI, unstable angina, severe arrhythmias or recent CVA. These patients should be warned of the damage of concurrent smoking. Strength C

The approved product information for all forms of NRT indicates that these are contraindicated in pregnancy and lactation (ADEC category D). Human studies on use of NRT in pregnancy and lactation are limited and the effects of low nicotine exposure on the human foetus are unclear (Australian Medicines Handbook, 2003). Smoking cessation guidelines produced in the Britain, the United States and New Zealand have recommended that non-pharmacological methods of smoking cessation are preferred in pregnancy. The US guidelines suggest considering using

pharmacotherapy in pregnancy when a pregnant woman is otherwise unable to quit, and when the likelihood of quitting, with its potential benefits, outweighs the risk of the pharmacotherapy and potential continued smoking (Fiore et al, 2000). The woman should be counselled in regard to the risks and benefits so that she can make an informed choice. The Australian Medicines Handbook (2003) states that in lactation the risk-benefit ratio may favour use of nicotine replacement.

#### **Evidence**

There is currently a lack of evidence on the safety of NRT in pregnancy but reports of expert committees have recommended use in certain circumstances. Level V

#### **Recommendation**

Pharmacotherapy with NRT should be considered when a pregnant woman is otherwise unable to quit, and when the likelihood and benefits of cessation outweigh the risks of NRT and potential continued smoking. Level C

Nicotine overdose can occur if the patient is on too high a dose of replacement or continues to smoke while using NRT. The more common symptoms of nicotine overdose include: pallor, cold sweat, nausea, tachycardia and agitation. Less common are salivation, vomiting, abdominal pain, diarrhoea, headache, dizziness, disturbed hearing and vision, tremor, mental confusion and weakness. If these are due to too high a dose then the dose of NRT should obviously be reduced. If they are due to continuing smoking while on NRT then the patient needs to be counselled not to smoke when using NRT.

## Bupropion sustained release

Bupropion sustained release (Zyban®) is a non-nicotine oral therapy to assist smoking cessation. Bupropion is a relatively weak inhibitor of the neuronal uptake of noradrenaline and dopamine, it has minimal effect on serotonin and does not inhibit monoamine oxidase. The mechanism by which bupropion enhances the ability of patients to abstain from smoking is unknown. However, it is assumed that this action is mediated centrally by noradrenergic and/or dopaminergic mechanisms. Bupropion helps reduce the withdrawal symptoms associated with stopping smoking. The drug has not demonstrated addictive properties in clinical trials or the general population. Bupropion sustained release is available as a Pharmaceutical Benefits Scheme (PBS) Authority Item once per year, **'for use within a comprehensive treatment program, as short-term adjunctive therapy for nicotine dependence with the goal of maintaining abstinence'**. On the PBS bupropion is now supplied as an initial prescription of 30 tablets and then a second prescription of 60 tablets. Arrangement should be made at the first consultation to book patients in for the follow-up visit. This follow-up visit is a valuable opportunity to support the quitting process and encourage quality use of bupropion.



## 6. Pharmacotherapy

Bupropion is an efficacious treatment for smoking cessation. Use of bupropion slow release approximately doubles cessation rates compared with placebo at 6 months follow-up (30.5%, 95% CI 23.3, 37.8) versus 17.3% (Fiore et al, 2000) when used as part of a comprehensive program of regular follow-up and brief behavioural strategies. A recent review of bupropion for smoking cessation (Richmond and Zwar, 2003) concluded that this medication is efficacious in a range of patient populations including those with cardiac and respiratory diseases, depression and among the general community. Bupropion has also been shown to be significantly more effective than placebo (continuous abstinence at six months 16% vs 9%) in smokers with COPD (Tashkin et al, 2001). This is a condition where smoking cessation is of utmost importance. In one study (Jorenby et al, 1999) bupropion was more effective than nicotine patch but more evidence is needed on comparison of pharmacotherapies.

### Evidence

Bupropion sustained release is an efficacious smoking cessation treatment. Level I

Bupropion sustained release should be recommended to smokers who have been assessed as clinically suitable for this medication and provided in combination with counselling. Strength A

### Safety of bupropion sustained release

Bupropion is contraindicated in the following patients:

- allergy to bupropion
- past or current seizures
- known CNS tumours
- undergoing abrupt withdrawal from alcohol or benzodiazepines
- current or previous history of bulimia or anorexia nervosa
- who are taking monoamine oxidase inhibitors or have taken them within the last 14 days.

Patients with predisposing risk factors for seizure must not be prescribed bupropion slow release unless the potential benefit of smoking cessation outweighs the increased risk of seizure. Predisposing risk factors for seizure include:

- concomitant use of medications known to lower seizure threshold e.g. antipsychotics, antidepressants (including SSRIs and tricyclics), antimalarials, tramadol, theophylline, systemic steroids, quinolones, sedating antihistamines
- alcohol abuse
- history of head trauma
- diabetes treated with hypoglycaemics or insulin
- use of stimulants or anorectic products. Concern has also been expressed in use of bupropion in people with schizophrenia because of the possibility of precipitating a psychotic episode (Strasser et al, 2002).

The safety of bupropion in pregnancy has not been established (ADEC category B2). Small amounts of bupropion and its metabolites are excreted in breast milk. Safety and efficacy in patients aged under 18 years has not been established.

In the study by Jorenby et al (1999) the most common adverse effects were insomnia (42%), headache (26%), dry mouth (11%), nausea (10%), dizziness (11%) and anxiety (9%). **The risk of seizures is 0.1% (1/1000) and patients need to be made aware of this potentially serious adverse effect.** Hypersensitivity reactions occur at a rate of about 3%. The most common reaction is pruritis, urticaria and/or angioedema. Serum-sickness-like reactions of arthralgia, myalgia and fever can occur in association with skin rash and these can be delayed 10-20 days after starting bupropion. The recommended and maximum dose of bupropion slow release is 300mg/day, given as 150mg twice daily. The initial dose is 150mg to be taken once daily for three days, increasing to 150mg twice daily with an interval of at least 8 hours between successive doses. Treatment with bupropion sustained release should be initiated while the patient is still smoking, quitting should occur during the second week, and the medication continued for at least 7 weeks. Treatment with bupropion has been found to delay the weight gain commonly associated with smoking cessation.

In a randomised controlled trial by Jorenby et al (1999), the combination of bupropion with nicotine patch was significantly more effective than patch alone (point prevalence abstinence at twelve months combined 35.5% vs 16.4%) but was not significantly better than bupropion alone (30.3%). In the study elevated blood pressure was noted in some patients on the bupropion and nicotine patch treatment. This was more common in those with pre-existing hypertension.

#### **Evidence**

Combination treatment with bupropion and nicotine patch is effective. Level II

#### **Recommendation**

Combination treatment with bupropion and nicotine patch should be considered where a smoker has not been successful on an adequate trial of one of these therapies. Blood pressure should be monitored during treatment. Strength C

## 6. Pharmacotherapy

### Other forms of pharmacotherapy

The Cochrane systematic review of antidepressants for smoking cessation (Hughes et al, 2003a) concluded that there was evidence of effect for nortriptyline. Nortriptyline has also been reviewed by Fiore et al (2000). In a meta-analysis of three studies abstinence rates were 30.1% (95% CI 18.1, 41.6) vs 11.7% in the placebo group. Nortriptyline is limited in its application by its adverse effects that include sedation, dry mouth and light-headedness. There is also a risk of arrhythmia in patients with cardiovascular disease. The efficacy of nortriptyline does not appear to be affected by a past history of depression (Hughes et al, 2003a).

#### **Evidence**

Nortriptyline is an efficacious smoking cessation treatment in people with and without a history of depression. Level II

#### **Recommendation**

Nortriptyline should only be considered as a second-line agent due to its adverse effects profile. Strength B

Clonidine is a centrally acting adrenergic agonist that has been used to reduce nicotine withdrawal symptoms especially cravings. In a meta-analysis of five studies by Fiore et al (2000) clonidine doubles smoking cessation abstinence at five months compared to placebo. The adverse effects of clonidine, in particular postural hypotension, greatly limit its use for smoking cessation. Naltrexone is a long acting opiate agonist that has been investigated as an aid to smoking cessation. In a trial involving 68 smokers there was no significant difference in abstinence rates between naltrexone and placebo groups (Covey et al, 1999). The Cochrane review of anxiolytics for smoking cessation concluded that there is no consistent evidence that anxiolytics aid smoking cessation, but the available evidence does not rule out a possible effect (Hughes et al, 2003b).

## 7. Other Forms of Therapy for Smoking Cessation

### **Acupuncture**

Acupuncture as an aid to smoking cessation has been the subject of a number of controlled studies. Two meta-analyses have reviewed the results of controlled studies (White et al, 1999; Fiore et al, 2000). There was no significant difference between 'active' acupuncture or 'inactive' or sham acupuncture procedures.

### **Hypnotherapy**

Hypnotherapy as an aid to smoking cessation has been the subject of a number of studies, including some controlled trials but the Cochrane systematic review (Abbott et al, 2002) concluded that there was such heterogeneity between methods and results that a meta-analysis of the literature was not possible at that time. The review concluded that hypnotherapy does not show a greater effect on six month quit rates than other interventions or no treatment.

#### **Evidence**

There is no significant effect of acupuncture or hypnotherapy in smoking cessation. Level I

#### **Recommendation**

On the evidence available acupuncture and hypnotherapy are not recommended as aids to smoking cessation. Strength A

## 8. Smoking Cessation and Prescribed Medications

Cigarette smoking has a number of effects on drug metabolism particularly of antipsychotics, theophylline, insulin and warfarin. Antipsychotic medications with a metabolism that is affected by smoking are clozapine, fluphenazine, decanoate, haloperidol and olanzapine. A dosage reduction may be possible following smoking cessation. This can have benefits in terms of adverse effects. Advice or consultation with a psychiatrist may be necessary. Smokers metabolise theophylline more rapidly so the dose may need to be decreased on smoking cessation. According to the Drug and Therapeutics Information Service (DATIS), within 7 days of smoking cessation theophylline clearance falls on average by 35%. DATIS suggests monitoring drug plasma levels and adjusting the dose if needed. Insulin absorption can be reduced by smoking so cessation may result in increased absorption and consequently the risk of hypoglycaemia. Increased monitoring of blood glucose is advisable and reduction of insulin dose may be needed. Increased monitoring of anti-coagulation is indicated at the time of smoking cessation and adjustment of warfarin dose may be needed.

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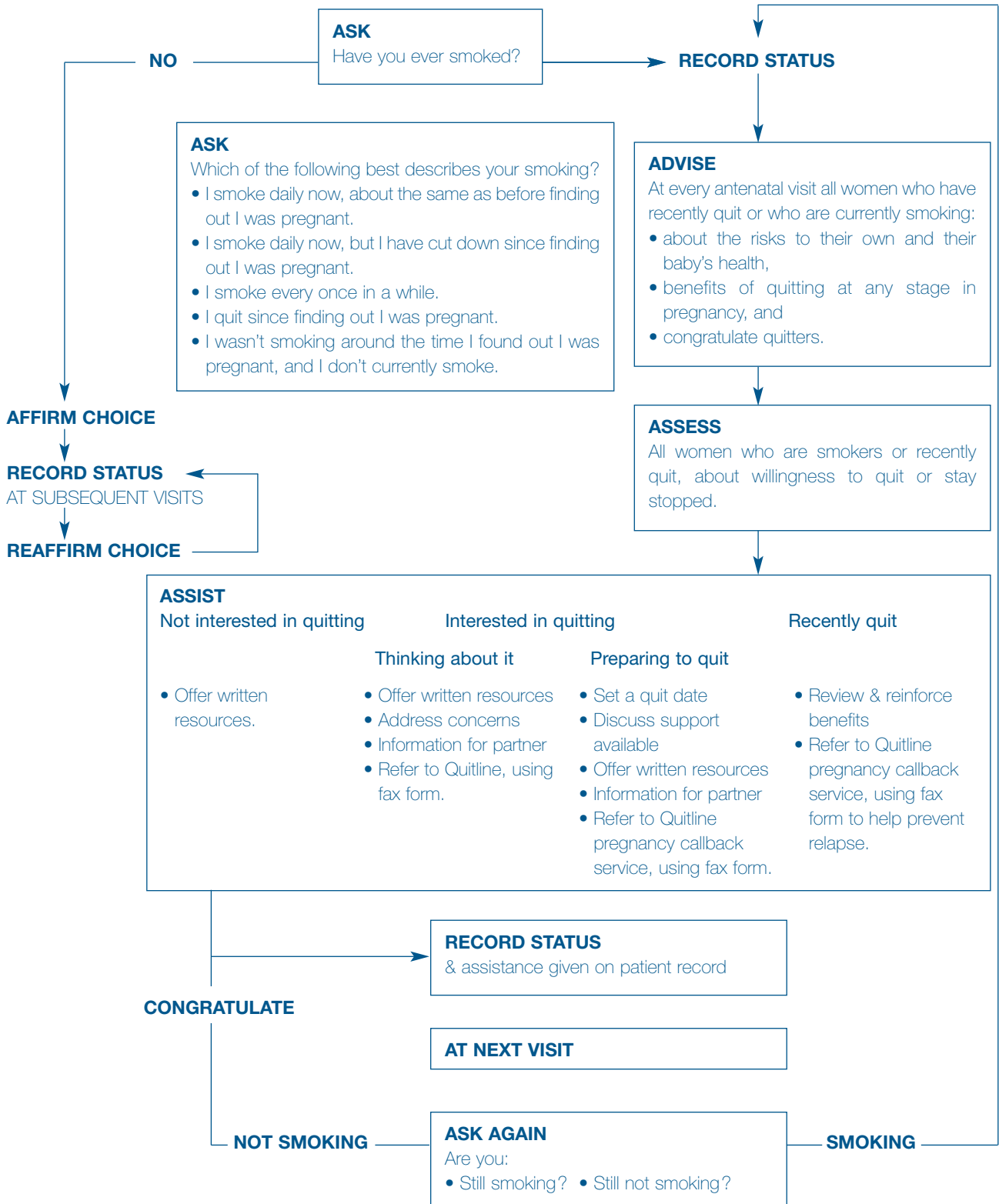
### Pregnant and lactating women

Cigarette smoking by pregnant women causes a range of adverse fetal outcomes including stillbirth, spontaneous abortion, reduced fetal growth, premature birth, low birth weight, placental abruption, sudden infant death, cleft palate, cleft lip, and childhood cancers (Fiore et al, (2000). Approximately 30% of women in Australia are smokers when they become pregnant (Wakefield and Jones, 1998) and 23% smoke during pregnancy (Walsh et al, 1997; Panjari et al, 1999). It is important to realise that high levels (between 30 and 50%) of deception about smoking cessation have been reported during pregnancy (Walsh et al, 1996; Windsor et al, 1998) as women may feel guilty or stigmatised if they admit to smoking. For this reason accurate information on smoking status in pregnancy may be better collected using a written questionnaire rather than verbal questioning.

Approximately 20-30% of women quit when they become pregnant but about 70% of these women relapse either during pregnancy or after the baby is born. This is an important group to identify as they have made a quit attempt and are motivated. There is evidence of efficacy of smoking cessation interventions during pregnancy. A meta-analysis by Lumley et al, (2000) showed that exposure to any smoking cessation intervention halved the proportion of women who continued to smoke during pregnancy. It is important to use antenatal visits as an opportunity for discussing behavioural risk factors such as smoking. Relapse in the post-partum period is high though there is evidence that this can be reduced by smoking cessation interventions in the post-partum period (Lumley et al, 2000). An algorithm based on the 5As for smoking cessation intervention for pregnant women developed by Quit Victoria follows.

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## Smoking cessation intervention for pregnant women



### Some suggestions on providing a brief intervention

#### Assist deciding

Discuss

- conflict
- decision making
- barriers to quitting
- benefits of quitting at any stage in pregnancy

#### Assist trying to stop smoking

Discuss

- 3 aspects of addiction
- withdrawal symptoms
- quitting methods
- quitting aids
- importance of quitting for self as well as for baby

Plan

- quitting strategies
- reward system
- support network

#### Assist staying stopped

- congratulate on quitting
- enhance self confidence
- review reasons for quitting
- encourage the non-smoker image

Discuss

- high-risk times e.g. late pregnancy, post-partum, weaning
- remind about resources & supports

#### Evidence

There is currently a lack of evidence on the safety of pharmacotherapy in pregnancy but reports of expert committees have recommended use in certain circumstances. Level V

#### Recommendation

Pharmacotherapy should be considered when a pregnant woman is otherwise unable to quit, and when the likelihood and benefits of cessation outweigh the risks of pharmacotherapy and potential continued smoking. Strength C

## Adolescents

Adolescence is the primary time when cigarette smoking is initiated and transition from experimentation to dependence occurs. Data from the National Drug Strategy Household Survey (2002) shows that 15% of young people aged 14-19 are daily smokers. There was no significant difference between sexes (16.2% in females and 14.1% in males). The reasons young people commence smoking are varied and relate to social and parental norms, advertising, peer influence, parental smoking, weight control and curiosity (Fiore et al, 2000). Recruitment and retention of adolescents in formal smoking cessation programs are difficult and are a major determinant of intervention targeting young people (Henningfield et al, 2000; Sussman et al, 1999). Computer and internet cessation program are potential vehicles for programs aimed at young people but as yet there is no clear evidence on efficacy. Examples are the national youth smoking website [www.OxyGen.org.au](http://www.OxyGen.org.au) and Queensland Health's site for young people at [www.100incontrol.com](http://www.100incontrol.com).



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It is important for general practitioners to take the opportunity to discuss smoking with young people whenever it arises, especially as these patients are generally healthy and therefore infrequent attenders. Opportunities to discuss smoking may occur if the presenting problem is potentially related to smoking, when discussing other drug issues or when doing an adolescent health assessment using a framework such as HEADSS. HEADSS stands for Home environment, Education and Employment, peer Activities, Drugs, Sexuality and Suicide/depression (Bennett, 2001).

The GP can reinforce messages from community and school-based anti-smoking activities. A comprehensive list of resources for smoking prevention and cessation activities in school communities can be found by searching the Resilience Education and Drug Information website at [www.redi.gov.au](http://www.redi.gov.au). Parents can be informed that the most effective thing they can do to prevent their adolescent children from taking up smoking is not to smoke themselves and of the importance of not exposing young people to environmental tobacco smoke.

There is a lack of evidence on the safety and efficacy of smoking cessation pharmacotherapies in children and adolescents. In adolescents, pharmacotherapy with NRT or bupropion should be considered where there is evidence of nicotine dependence and a desire to quit tobacco use.

### Aboriginal and Torres Strait Islanders

Aboriginal and Torres Strait Islander (ATSI) adults are almost twice as likely to smoke as non-ATSI adults. Smoking rates vary between communities and with age but overall is about 55% for men and 30% for women (ABS, 1999). The average age that ATSI people start smoking is 15 years, which is younger than the general population. Aboriginal and Torres Strait Islander people also experience higher mortality from a number of smoking-related diseases (including cardiovascular diseases, a number of cancers and respiratory disease) compared to the general Australian population (AIHW, 2000). Smoking among Indigenous women during pregnancy is very common with rates of up to 72% reported (Ivers, 2001).

Though various smoking cessation methods have been shown to be effective across different racial and ethnic groups in other countries (Fiore et al, 2000) there has been a lack of research and evaluation of tobacco interventions in Indigenous Australian contexts (Ivers, 2001). Smoking cessation methods identified as being effective, such as brief advice and pharmacotherapy, should be provided for ATSI people. Effective smoking cessation methods should be modified or tailored to meet the needs of Aboriginal people. This can involve working in collaboration with or through Aboriginal and Torres Strait Islander health workers. Specific barriers to smoking cessation treatment for Aboriginal and Torres Strait Islander people need to be addressed. These include the social context and pressures to smoke in ATSI communities and socio-economic inequity, which limits access to some forms of treatment such as NRT. There is also evidence of less knowledge about harmful effects of tobacco smoking among ATSI people. A number of programs specifically designed for ATSI people are available. For example *SmokeCheck* is a training program for primary health care workers to use with Indigenous clients. It was developed in consultation with Indigenous communities in North Queensland as part of Queensland Health's *Indigenous Smoke-free Project*.

## People from culturally and linguistically diverse backgrounds

Smoking is more common in several cultural and linguistic groups in the Australian community including men from Vietnamese and Chinese backgrounds and men and women from Arabic backgrounds. Rates in Vietnamese men in metropolitan Sydney have been estimated to be as high as 53% (Rissel and Russel, 1993). Prevalence in the Arabic community has been estimated to be between 42% and 55% (ABS, 1990; Jukic et al, 1996).

Effort needs to be made to provide support for cessation to these groups using appropriate resource materials. Information on smoking cessation is available in two versions of a brochure 'Want to quit?' at [www.quitnow.info.au](http://www.quitnow.info.au) in Arabic, Chinese, Greek, Italian, Korean, Spanish, Turkish, Vietnamese (version one) and in Dari, Bosnian, Albanian, Kurdish, Persian, Somali and Tigrigna (version two) as well as English. Quit Victoria has quitting resources available in 13 languages other than English ([www.quit.org.au](http://www.quit.org.au)). Another source of materials is the NSW Multicultural Health Communication Service at [www.mhcs.health.nsw.gov.au](http://www.mhcs.health.nsw.gov.au).

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### People with smoking related disease

There is clear evidence that people with smoking related disease who continue to smoke greatly increase their risk of further illness. For example second heart attacks are more common amongst cardiac patients if they continue to smoke (Lightwood and Glantz, 1997) and people with successfully treated cancers who continue to smoke are at increased risk of a second cancer. Diabetics who smoke increase their risk of cardiovascular disease, peripheral vascular disease, progression of neuropathy and nephropathy (Ruggiero et al, 1999). There is a clear relationship between continued smoking and progression of COPD.

In a study of patients with cardiovascular disease, NRT administered by patch was not more effective than placebo (Joseph, 1999). Bupropion sustained release has been found to nearly double the rate of 6 month continuous abstinence compared to placebo (16% vs 9%) among those with mild to moderate COPD (Tashkin et al, 2001). Bupropion has also been evaluated in a study examining a population of chronic smokers who had a mean pack year history of 50 years and an average of 5 previous quit attempts. Half of the subjects had suffered a myocardial infarction and a quarter had been diagnosed with COPD and/or diabetes (McRobbie et al, 2001). Continuous abstinence rates at 6 months among those who used bupropion were between two and three times higher than for those receiving placebo (27% vs 11%).

In a study of patients with stable cardiovascular disease by Tonstad et al, (2003) continuous abstinence for 12 months in patients treated with bupropion was more than twice placebo (22% vs 9%).

People with smoking related disease or with other risk factors for cardiovascular disease such as diabetes, lipid disorder and hypertension may be suitable for a multidisciplinary preventive care plan. These are patients where there is clear evidence of smoking related harm and the GP has a vital role to play. Examples of other health professionals who could be asked to contribute depend on the health problems present. Examples are diabetes educator, community pharmacist, specialist physician, practice nurse and primary health nurse. In some states Quitline counsellors also have the capacity to be involved in a care plan.

#### **Evidence**

Continued smoking is a major factor in the recurrence or increasing severity of smoking related diseases.  
Level III

#### **Recommendation**

Smoking cessation should be a major focus of the management of people with smoking related illnesses.  
Strength A

## People with mental illness

Smoking in people with mental health problems is common – estimates range from 50 to 80% (Hughes, 1993; Polgar et al, 1996). It has also been estimated that 30% of people seeking smoking cessation treatment may have a history of depression (Fiore et al, 2000). As smoking rates in the population decrease the presence of other issues such as mental health are becoming relatively more frequent in the smokers seen in general practice. These people should be offered smoking cessation interventions that have been shown to be effective in the general population. Mental illness is not a contraindication to stopping smoking but the illness and its treatment need to be monitored carefully during smoking cessation.

Smokers with a previous depressive history have a 20-30% rate of recurrence of their depression on smoking cessation (Covey, 1999), are at increased risk of problems related to smoking and have more difficulty in quitting (Wilhelm et al, 2004). The period of vulnerability to a new depressive episode appears to vary from a few weeks to several months after cessation (Covey, 1998). There is evidence that both bupropion and nortriptyline are equally effective in smokers both with and without a history of depression (Hayford et al, 1999; Hughes, 2003). An important issue in smokers with depression is that bupropion can interact with a number of antidepressant medicines by lowering the seizure threshold or through other mechanisms. Caution is needed if there is concomitant use of bupropion with drugs metabolised by CYP2D6 isoenzyme (e.g. tricyclic antidepressants and selective serotonin reuptake inhibitors). If these drugs are initiated while a patient is taking bupropion then it should be at the lower end of the dosage range. In the more common situation that bupropion is initiated for a patient already taking such antidepressants then the dose of tricyclic or SSRI may need to be decreased. Bupropion should not be used in patients taking monoamine oxidase inhibitors including moclobemide. A 14 day washout is recommended between completing MAOIs and starting bupropion. For further information on interactions see the Zyban Product Information.

### **Evidence**

Bupropion sustained release is equally effective in assisting smoking cessation in people with and without a history of depression. Level II

Nortriptyline is an efficacious smoking cessation treatment in people with and without a history of depression. Level II

### **Recommendation**

Bupropion sustained release should be considered as pharmacotherapy to assist cessation in smokers with current or past history of depression. Strength C

Nortriptyline should only be considered as a second-line agent due to its adverse effects profile. Strength B

## 9. Special Groups

The prevalence of smoking in people with schizophrenia may be as high as 90% (Glassman, 1993). Nicotine may modify some negative psychotic symptoms such as lack of motivation and energy and may decrease positive psychotic symptoms such as auditory hallucinations. There is evidence that many people with schizophrenia are concerned about their smoking and want help to address it (Addington et al, 1997). Guidelines for smoking reduction and cessation for people with schizophrenia (Strasser et al, 2001) suggest that as well as assessing motivation to quit, the GP also needs to assess the risks of quitting. Key risks are of a further psychotic episode, depression and change in medication effects. A summary table from the guidelines is shown below.

**Table 1. Summary of guidelines for management of smoking in people with schizophrenia**

Identify smokers	Congratulate if not a smoker!
Assess readiness to quit	If not ready, find a personalised reason to quit. Take a smoking history.
Assess risks of smoking cessation	Psychotic relapse: know usual signs for this patient. Depression: know if past history or family history. Change in medication effects: know patient's current side effects, if any.
Write an individual plan	A written plan is important as cognitive deficits may be present.
Use nicotine replacement	Significantly increases quit rates and minimises withdrawal symptoms.
Recommend group support	Aids relapse prevention.
Monitor frequently	See 1-3 days after quitting: deal with any problems. See weekly for one month: Assess for <ul style="list-style-type: none"> <li>• psychotic relapse</li> <li>• depression</li> <li>• medication effects.</li> </ul> See monthly for six months: Continue to monitor mental state and medication.
Congratulate on any progress	

The full guidelines are available on the Victorian Department of Human Services website: [www.dhs.vic.gov.au/acmh/mh/publications](http://www.dhs.vic.gov.au/acmh/mh/publications).

The guidelines suggest that bupropion slow release is not suitable for routine use in people with schizophrenia as it may precipitate or exacerbate psychosis. The guidelines from SANE further state that bupropion should only be used with care and caution in people with schizophrenia with both the patients and prescriber being aware of these potential problems, and with appropriate monitoring (Strasser, 2002).

Smoking affects the blood levels of some medications used to treat mental illness through induction of liver enzymes by hydrocarbons in tobacco smoke. Several studies have documented that smoking lowers the blood levels of some neuroleptic agents by up to 50% (Zeidonis, 1997). Antipsychotic medications with a metabolism that is affected by smoking are clozapine, fluphenazine decanoate, haloperidol and olanzapine. If a person stops smoking or significantly reduces the number of cigarettes smoked the blood levels of these medications may be increased and adverse effects such as drowsiness and hypotension experienced. Consultation with a psychiatrist may be needed to assist with dosage adjustment. Antipsychotics with a metabolism that does not appear to be affected by smoking include risperidone and quetiapine.

## People with substance-use disorders

Smoking is common in and may also be associated with other substance-use disorders such as alcohol, cannabis and opiate dependence (Degenhardt and Hall, 2001). However smoking cessation has not been a major part of clinical interventions with these patients as the attention is usually focussed on the alcohol or illicit drug use. As many as 20% or more of people seeking smoking cessation services may have a history of alcohol abuse or dependence (Fiore, 2000). There is evidence that people with alcohol dependence can have similar success rates in smoking cessation to the general population and that tobacco abstinence does not increase alcohol relapse (Sullivan and Covey, 2002). There is also evidence that continued smoking adversely affects treatment for cannabis dependence. Success in smoking cessation for people with opiate dependence is lower than the general population. Monitoring and support are needed for smoking cessation in people with substance-use problems and such patients may benefit from the involvement of other health professionals such as a drug and alcohol counsellor.

## 10. Environmental tobacco smoke

### Environmental tobacco smoke (passive smoking)

There is clear evidence of the harms of exposure to environmental tobacco smoke in pregnancy, to children (higher rates of respiratory and middle ear infections, meningococcal infections and asthma) and adults (increased risk of lung cancer and coronary heart disease). The evidence for the health effects of passive smoking has been summarised by a number of health authorities including the National Health and Medical Research Council (NHMRC, 1997).

There is a lack of evidence on the effectiveness of counselling non-smokers to limit exposure to tobacco smoke. There is evidence that providing information to parents on the harms of exposing children to environmental tobacco smoke can reduce children's exposure (Fiore et al, 2000). Due to the evidence of harms from exposure, non-smokers, especially parents of babies and young children and pregnant women, should be counselled to limit exposure to tobacco smoke (RACGP, 2002). Smoking parents should be counselled not to smoke in the house or in a confined space such as a motor vehicle at any time.

There is also evidence that providing information to parents on the harms of exposing children to environmental tobacco smoke may reduce parental smoking rates (Fiore et al, 2000).

#### **Evidence**

Introducing smoking restrictions into the home can assist quitting smoking successfully. Level IV

#### **Recommendation**

People attempting to quit should be advised to ban or restrict smoking by others in their homes. Strength C

# 11. Resources

## Quitline 131 848

The Quitline (131 848) in each state and territory can provide a free Quit Pack and over the telephone counselling assistance. The cost is a local call from both rural and metropolitan areas. In some states and territories smokers can be offered a call back telephone counselling service to assist them through the quitting process. Quitlines can provide counsellors for a range of languages in some states.

Quit Victoria – [www.quit.org.au](http://www.quit.org.au)

Quit Victoria has resources available in 13 languages other than English. Quit Victoria also provides The Quit Coach ([www.thequitcoach.org.au](http://www.thequitcoach.org.au)), an internet based smoking cessation program that gives smokers personalised advice.

Quit South Australia – [www.quitsa.org.au](http://www.quitsa.org.au)

Quit Tasmania – [www.quittas.org.au](http://www.quittas.org.au)

Quit Western Australia – [www.quitwa.com](http://www.quitwa.com)

National Tobacco Campaign – [www.quitnow.info.au](http://www.quitnow.info.au)

A collaborative quit-smoking health initiative between federal, state and territory governments and non-government organisations.



# 11. Resources

## Resources for pregnant and lactating women

**Quit Victoria [www.quit.org.au](http://www.quit.org.au) Ph: 03 9663 7777**

Smoking and Pregnancy brochure  
Staying Stopped: Remaining a Non-Smoker after Your Pregnancy brochure  
Passive smoking and your children brochure  
Can You Think of a Better Reason to Quit? Card  
Important Information for Fathers who Smoke brochure  
Passive smoking background brief  
Smoking, Pregnancy and Infants background brief  
Extended callback service on Quitline for pregnant smokers

**Queensland Ph: 131 120 Fax: 07 3258 2281 email: [helpline@qldcancer.com.au](mailto:helpline@qldcancer.com.au)**

- 'Baby and You' magazine
- Smoking and Pregnancy brochure

**Quit Tasmania Ph: 03 6228 2921 Fax: 03 6228 4149**

- Smoking and Pregnancy brochure
- Motherhood and Smoking, Breastfeeding and Smoking brochure

**Quit South Australia Ph: 08 8291 4141 Fax: 08 8291 4194**

- Smoking and Pregnancy brochure
- Staying stopped – remaining a non-smoker after your pregnancy brochure
- Important news for fathers who smoke brochure

**Quit Western Australia [www.quitwa.com](http://www.quitwa.com)**

- Women and Smoking brochure
- Passive Smoking and Children brochure
- Smoking and Pregnancy brochure
- Staying Stopped (recently quit) brochure

**Quit New South Wales Ph: 02 9391 9111 email: [tobacco@doh.health.nsw.gov.au](mailto:tobacco@doh.health.nsw.gov.au)**

- Smoking in pregnancy fact sheet

## Resources for adolescents

### Internet sites for young people

#### [www.OxyGen.org.au](http://www.OxyGen.org.au)

This is an interactive site for young people about smoking, designed to encourage health lifestyle choices and to provide information on the impact of tobacco.

[www.100incontrol.com](http://www.100incontrol.com) is a site provided by Queensland Health for young people wanting smoking prevention and cessation material.

## Resources for Aboriginal and Torres Strait Islanders

### Quit New South Wales

Ph: 02 9391 9111

email: [tobacco@doh.health.nsw.gov.au](mailto:tobacco@doh.health.nsw.gov.au)

- Aboriginal health worker training kit including manual, handbook, poster
- Series of pamphlets on a smoking cessation for ATSI communities

**Queensland Health.** SmokeCheck is a training program for primary health care workers to use with Indigenous clients. It was developed in consultation with Indigenous communities in North Queensland as part of Queensland Health's Indigenous Smoke-free Project.

## Resources for people from Culturally and Linguistically Diverse Backgrounds

Quit Victoria: [www.quit.org.au](http://www.quit.org.au) or contact your State or Territory Quit Campaign. The Quit Book is available in Arabic, Cambodian, Chinese, Croatian, Greek, Italian, Korean, Macedonian, Polish, Russian, Serbian, Spanish, Turkish and Vietnamese.

National Tobacco Campaign: [www.quitnow.info.au](http://www.quitnow.info.au) or contact your State or Territory Quit Campaign. 'Want to quit?' brochure Information in version one of this resource for smokers is in Arabic, Chinese, Greek, Italian, Korean, Spanish, Turkish and Vietnamese. Version two has information in Dari, Bosnian, Albanian, Kurdish, Persian, Somali and Tigrigna.

Quit Western Australia: [www.quitwa.com](http://www.quitwa.com) 'Your guide to quitting' is available in Macedonian, Chinese, Polish, Italian, Vietnamese, Indonesian, Greek and Malay

# 11. Resources

## Resources for people with mental illness

### **Victoria [www.quit.org.au](http://www.quit.org.au) Ph: 03 9663 7777**

Quit Victoria has tailored Quit Packs and has developed Quitline Guidelines to assist smokers with mental illness.

### **SANE Australia**

SANE SmokeFree Zone (guides for consumers and supporters) available for sale [www.sane.org](http://www.sane.org)

### **QUIT South Australia Ph: 08 8291 4141 Fax: 08 8291 4194**

"Are you sick of smoking?" brief guide for people with mental illness.

"How can I support someone to address their smoking?" brief guide for family friends, health workers and doctors.

- "I'm thinking of giving up smoking tobacco" step by step guide for people with mental illness who smoke.

## Resources on environmental tobacco smoke

NSW 'Car and home smoke free zone' [www.smokefreezone.org](http://www.smokefreezone.org). ETS and Children Campaign. This Campaign is a collaborative effort by NSW Health, the Cancer Council, the Heart Foundation, SIDS NSW and Asthma NSW. The website provides information about the risks associated with environmental tobacco smoke and strategies to reduce exposure for parents and health professionals.

## Resources for health professionals

RACGP publications *Guidelines for preventive activities in general practice* (2002) and *Putting prevention into practice* (1998): [www.racgp.org.au/reports](http://www.racgp.org.au/reports)

U.S. Department of Health and Human Services Clinical Practice Guideline *Treating Tobacco Use* and Dependence (2002): <http://www.surgeongeneral.gov/tobacco/default.htm>

New Zealand *Guidelines for Smoking Cessation*: [http://www.nzgg.org.nz/library/gl\\_complete/smoking/index.cfm#contents](http://www.nzgg.org.nz/library/gl_complete/smoking/index.cfm#contents)

NSW Health Guide for the management of nicotine dependent inpatients – Summary of Evidence – [www.health.nsw.gov.au/public-health/health-promotion/pdf/Tobacco/patsmoke.htm](http://www.health.nsw.gov.au/public-health/health-promotion/pdf/Tobacco/patsmoke.htm)

Tobaccopedia – online tobacco encyclopedia organised by subject – [www.tobaccopedia.org/](http://www.tobaccopedia.org/)

World Health Organization site on tobacco – [www.who.int/toh/](http://www.who.int/toh/)

Treatobacco.net – [www.treatobacco.net](http://www.treatobacco.net)

This site provides evidence-based data and practical support for the treatment of tobacco dependence. It is aimed at health professionals and policy makers. Treatobacco.net is produced and maintained by the Society for Research on Nicotine and Tobacco, in association with the World Bank, Centers for Disease Control and Prevention, the World Health Organization, the Cochrane Group and a panel of international experts.

GLOBALink – International Tobacco Control Network managed by the International Union against Cancer – [www.globalink.org/](http://www.globalink.org/)

Action on Smoking Health – [www.ashaust.org.au](http://www.ashaust.org.au)

Action on Smoking and Health (Australia) is a not for profit organization which aims to reduce the harmful effect of tobacco use by advocating a comprehensive tobacco control, strategy at national, state and local levels.

Resilience Education and Drug Education – [www.redi.gov.au](http://www.redi.gov.au). This website from the Australian Government Department of Education, Science and training contains a comprehensive database of resources, policies and materials for drug education.

SANE – [www.sane.org/](http://www.sane.org/) – is an advocacy organization to assist people with mental illness. SANE has developed a number of resources on mental illness and smoking. **The SANE SmokeFree Zone** is a resource pack specially designed for people with a mental illness to help them reduce and quit smoking. A SANE Smokefree Kit is also available for health professionals, containing a group program designed to help people with a mental illness to quit. Also available are SANE Smokefree guidelines for GPs. Summary of guidelines for management of smoking in people with schizophrenia [www.dhs.vic.gov.au/acmh/mh/publications](http://www.dhs.vic.gov.au/acmh/mh/publications)

**To re-order the Smoking Cessation Guidelines flipchart and/or practice handbook, please call 1800 020 103. Alternatively, the website address: <http://www.health.gov.au/pubhlth/publicat/order.htm>**

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# Smoking Cessation Resources Order Form for General Practitioners

Quit resources for doctors wanting to help patients stop smoking

Resources for smokers (available free of charge)	Quantity (max 10 each)
<b>Quit Book</b> This booklet focuses on the health effects of smoking, the benefits of quitting, the various methods of quitting and how to stay a non-smoker.	<input type="checkbox"/>
<b>4Ds card</b> A pocket size card outlining some tips to help smokers through the cravings.	<input type="checkbox"/>

## Additional Resources

If you would like information about other resources available in your State or Territory please tick this box

## Contact details

Name of Doctor: \_\_\_\_\_

Name of Practice: \_\_\_\_\_

Postal Address: \_\_\_\_\_

Postcode: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

### How to Order

Send this form to:

**ACT:** The Cancer Council:  
Fax (02) 6262 2233

**NSW:** Tobacco Resources Officer,  
Better Health Centre:  
Fax (02) 9879 0994

**NT:** Alcohol & Other Drugs Service  
Tobacco Action Project:  
Fax (08) 8922 7768

**QLD:** Queensland Cancer Fund:  
Fax (07) 3258 2281

**SA:** Quit SA:  
Fax (08) 8291 4194

**Tas:** Quit Tasmania:  
Fax (03) 6228 4149

**Vic:** Quit Victoria Health  
Professionals Program:  
Fax (03) 9635 5510

**WA:** Quit WA:  
Fax (08) 9222 2088

To obtain further  
copies of this form  
either photocopy or  
download form from  
[www.quitnow.info.au](http://www.quitnow.info.au)



# Smoking Cessation Referral Form

## GPs Referral to Quitline

### Fax Numbers:

ACT (02) 6262 2223 • NSW (02) 9361 8011 • NT (08) 8922 8403 • Qld (07) 3238 4075 • SA (08) 8291 4280  
Tas (03) 6228 4149 • Vic (03) 9635 5520 • WA (08) 9222 2088

### From: Dr \_\_\_\_\_

### Address: \_\_\_\_\_

### Phone: \_\_\_\_\_

### Fax: \_\_\_\_\_

Privacy Warning: The information contained in this fax message is intended for Quitline Staff only. If you are not the intended recipient you must not copy, distribute, take any action reliant on, or disclose any details of the information in this fax to any other person or organisation.

### Confidential

Patient's Name \_\_\_\_\_ D.O.B \_\_\_\_\_

Patient's preferred phone no. (h) \_\_\_\_\_ (w) \_\_\_\_\_ (m) \_\_\_\_\_

What is the best time & day for Quitline to call? Monday – Friday  9am – 1pm  1pm – 5pm  5pm – 8 pm  
Is it okay for Quit to leave a message? Yes  No

### Smoking status

Daily  Weekly  Less than weekly \_\_\_\_\_ Number per day

### What stage is your patient at with quitting?

Not ready (not currently thinking of quitting)  Unsure (thinking about quitting within 6 months)  
 Ready (planning to quit within 1 month)  Recent quitter (within the last year)

### Use of medication?

Currently using/ planning to use Bupropion Hydrochloride (Zyban)  
 Currently using/ planning to use nicotine patches/gum/inhaler/lozenge

### What are the patient's health issues relevant to Quitline counsellors?

Heart/lung disease  Respiratory disease  Diabetes  Depression  Anxiety  
 Pregnancy  Other – please specify \_\_\_\_\_

### Please note

The interaction of chemicals in cigarettes and some medications eg. Insulin, some antidepressants / antipsychotics, and the interplay between the chemicals and some symptoms can mean some smokers need monitoring of drug levels and symptoms by their GP through the quitting process.

GP is monitoring the above

I consent to this information being faxed to Quitline and for Quitline Staff to call me at a time that I have suggested on this form. I understand that persons within the organisation with access to the fax machine, who may not be Quitline staff, might view this form.

\_\_\_\_\_  
GP's signature

\_\_\_\_\_  
Patient's signature

\_\_\_\_/\_\_\_\_/\_\_\_\_  
Date

### For use by Quitline staff

Quitline Confirmation of Action on Referral

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Your referral for \_\_\_\_\_

has been received by Quitline on \_\_\_\_/\_\_\_\_/\_\_\_\_

A call back time has been organised for \_\_\_\_/\_\_\_\_/\_\_\_\_



To obtain further copies of this form either photocopy or download form from [www.quitnow.info.au](http://www.quitnow.info.au)

The following organisations have endorsed these guidelines:



To re-order the Smoking Cessation Guidelines flipchart and/or practice handbook, please call 1800 020 103. Alternatively, the website address: <http://www.health.gov.au/pubhlth/publicat/order.htm>