

# Helping Smokers Quit

*A Health Professional's Guide to Brief Intervention*



**Queensland** Government  
Queensland **Health**

© Crown copyright  
All rights reserved  
Queensland Government 2006

Excerpts from this publication may be reproduced, with appropriate acknowledgment, as permitted under the Copyright Act. Permission to reproduce for commercial purposes should be sought from Queensland Health, GPO Box 48, Brisbane Qld 4001.

**Note:** Clinical interventions and medical knowledge are constantly being updated. As new information becomes available, changes in treatment, procedures and technique become necessary. The authors have, as far as possible, taken care to ensure that the information given in this text is accurate and up to date. However, readers are strongly advised to confirm that the information complies with the latest legislation and standard of practice.

ISBN 1921021330

**Helping Smokers Quit: A health professional's guide to brief intervention**

For further copies of this guide and/or its accompanying chart, a Resource Order Form is at the back of this guide. Copies can also be downloaded from the Queensland Health website: [www.health.qld.gov.au/atods](http://www.health.qld.gov.au/atods)

March 2006

## TABLE OF CONTENTS

About this guide .....	5
New tobacco laws .....	5
Health professional's role .....	6
Just a little time and effort .....	6
Quitline .....	6
<i>SmokeCheck</i> .....	7
Health effects of smoking .....	7
Benefits of quitting .....	8
Quit smoking brief intervention .....	9
Ask .....	11
Assess .....	13
Advise .....	17
Assist .....	19
Arrange follow-up .....	29
References .....	31
Resource Order Form .....	32
Quitline Referral Form .....	33

## Acknowledgments

Queensland Health would like to thank the following people and agencies for the advice and assistance provided in the development of this guide.

- Staff of the NSW Health Tobacco and Health Branch, who collaborated on earlier drafts of this document
- Professor Robyn Richmond, University of New South Wales
- Professor Nicholas Zwar, University of New South Wales
- Department of Health and Ageing, Australian Government
- Staff of Queensland Health and non-government alcohol, tobacco and other drug agencies, who provided feedback on earlier drafts of this document.

## ABOUT THIS GUIDE

Now is the perfect time to help your clients/patients to quit smoking, with many people thinking about a quit attempt as a result of new smoking bans. A recent Victorian study found that having smoke-free pubs and clubs can reduce cigarette consumption and increase quitting among smokers who frequently go to these venues. More than a quarter of smokers said that they were somewhat or very likely to quit smoking altogether, if smoking is banned in pubs and clubs.<sup>1</sup>

Evidence for the effectiveness of quit smoking interventions and pharmacotherapies has also never been stronger.

This guide and accompanying chart provides:

- a simple evidence-based five step process (the '5As')
- a practical way to assess nicotine dependence and a person's preparedness for change as part of routine health care
- information on the health effects of smoking and the benefits of quitting
- information on pharmacotherapies
- tips for motivational interviewing
- sample questions to use when conducting brief interventions
- Resource Order Form and Quitline Referral Form.

This guide complements the Australian Government publication *Smoking Cessation Guidelines for General Practice - 2004 Edition* (the 'GP Guidelines').<sup>2</sup>

Components of the process described in this guide are from the *Smokescreen* program,<sup>3</sup> which applied Prochaska and DiClemente's 'Stages of Change'<sup>4</sup> to smoking cessation in the general practice setting. The *Smokescreen* program acknowledges that the smoker's level of motivation to quit smoking is a key issue and advice is provided based on the smoker's readiness to quit.

The evidence that underpins this guide has been drawn from the GP Guidelines and the National Tobacco Strategy publication *Smoking cessation interventions: review of evidence and implications for best practice in health care settings*.<sup>5</sup> The GP Guidelines also provide additional information on the '5As' and use of pharmacotherapies to assist smokers to quit. The GP Guidelines are on-line at [www.quitnow.info.au](http://www.quitnow.info.au).

## NEW TOBACCO LAWS

All Australian states and territories now have in place a range of tobacco laws to help reduce the public's exposure to environmental tobacco smoke. These laws also contribute to a culture that supports smokers trying to quit and discourages young people from taking up smoking.

Recent changes to Queensland's laws include total indoor smoking bans at pubs and clubs, workplaces and public places, smoking bans at outdoor eating or drinking areas provided by a business, and further restrictions on cigarette displays in retail outlets. Information on the Queensland tobacco laws is on-line at [www.health.qld.gov.au/atods](http://www.health.qld.gov.au/atods).

## HEALTH PROFESSIONAL'S ROLE

Tobacco laws are just one part of the anti-smoking effort. Assistance from health professionals is also vital.

Advice from health professionals is effective in encouraging smokers to quit. The major contribution a health professional can make is to motivate smokers to quit.<sup>2</sup>

Health professionals are well placed to make a significant difference because:

- they are seen as important sources of credible health information
- smokers expect to receive quit smoking advice from health professionals
- brief, repeated, non-judgmental assistance works
- quitting smoking is both do-able and worthwhile.<sup>6 7</sup>

Combining brief advice with other effective interventions such as pharmacotherapy can considerably increase quit smoking success.

## JUST A LITTLE TIME AND EFFORT

Time is a limited commodity in health care provision.<sup>2</sup> That is why brief intervention, which can involve as little as 3-5 minutes of assistance, is particularly suitable. Making the most of any opportunity to raise awareness, share information and get a client to think about making changes to their smoking is worth the time and effort.

Similar to other population-based strategies, when implementing brief interventions it can be difficult to see immediate results. However, evidence shows that although there may be a modest effect for individuals, there is the potential for substantial public health benefit.<sup>2</sup> This is because brief interventions motivate large numbers of smokers to make a quit attempt. Also, for every person who becomes a non-smoker, there is a new smoke-free role model for young people, other family members and work colleagues.

## QUITLINE



Quitline is Queensland Health's 24-hour telephone counselling service which offers assistance to smokers interested in changing their smoking behaviour. Quitline counsellors can assess a smoker's level of nicotine dependence, provide strategies on preparing to quit, prevention of relapse and staying a non-smoker, and provide information on products and services to assist in quitting. Quitline is the cost of a local call from anywhere in Queensland, with higher call costs for mobile phones.

Referral to Quitline can be via the Quitline Referral Form at the back of this guide, or by simply providing the Quitline telephone number to clients.

The national Quitline telephone number in use since the late 1980s was 131 848. A new telephone number, 13QUIT (13 7848), has been recently introduced to make the Quitline number easier to recognise and remember. The old Quitline number will be diverted to the new number until 2007.

## SMOKECHECK

Queensland Health's *SmokeCheck* program is Australia's first quit smoking brief intervention program developed for health professionals working with Indigenous clients. Specialist *SmokeCheck* brief intervention training and culturally effective quit smoking client resources are now available to health professionals in Queensland. Contact the *SmokeCheck* Program Coordinator on (07) 3238 4072 for further information.



## HEALTH EFFECTS OF SMOKING

Nearly all smokers are aware that smoking is damaging their health, but many have fairly limited knowledge about the diversity of adverse effects.<sup>2</sup>

Discussing the effects of smoking and the benefits of quitting can help motivate a quit attempt.

Tobacco smoke is a mix of over 4,000 chemicals, including carcinogens, which can reach the brain, heart and other organs within 10 seconds of the first puff.

The main constituents include:

- carbon monoxide, which robs the heart of oxygen
- tar, which clogs the lungs and causes or stimulates cancer
- phenols, which paralyse and eventually kill the hair-like cells lining airways
- fine particles, which irritate the throat and lungs, cause smoker's cough and damage lung tissue
- cadmium, lead, formaldehyde and hydrogen cyanide, toxins affecting all organs in the body.

Tobacco smoking is a proven risk factor for a range of fatal and debilitating diseases and conditions. These include cardiovascular disease, stroke and cancer. Smoking is widely recognised as causing lung cancer but also increases the risk of cancer of the lips, tongue, mouth, nose, oesophagus, pharynx, larynx, pancreas, bladder, cervix, vulva, penis and anus.<sup>5</sup> Smoking also increases the risk of male impotence, and women who smoke can experience menstrual problems, and/or reduced fertility.

The impact of smoking, however, is not just a question of length of life. Long-term smokers suffer more diseases and disability before they die at a younger age. In addition to the crippling effects of chronic obstructive pulmonary disease and stroke, disabilities exacerbated by smoking include reduced mobility from arthritis, diabetes, and vision and hearing loss.

Exposure to environmental tobacco smoke (passive smoking) causes cardiovascular disease, lung cancer, respiratory tract irritation, and an increased risk of bronchitis and pneumonia. It also precipitates the early onset of asthma in children, and increases the frequency and severity of asthma symptoms.<sup>5</sup>

## Facts

Smoking remains the leading cause of preventable disease and death in Queensland.

The Queensland smoking-toll is estimated at 3,400 deaths per year, 10-times higher than the road-toll.

20% of Queenslanders aged 14 years and over smoke daily, with the largest group of smokers aged 20-29 years.

Smoking rates for Indigenous people are more than twice the overall population, and rates of tobacco-related disease and premature death are also higher.

## BENEFITS OF QUITTING

The benefits of quitting start immediately, with noticeable improvements in the first 72 hours.<sup>8</sup>

Time since last cigarette	Benefits
20 minutes	Heart rate drops.
12 hours	Blood levels of carbon monoxide drop dramatically.
72 hours	Sense of taste and smell improve. Circulation improves.
2 weeks – 3 months	Heart attack risk begins to drop, lung function improves.
1 - 9 months	Coughing and shortness of breath decrease.
1 year	Risk of coronary heart disease is halved after one year compared to continuing smokers.
5 years	Stroke risk is reduced to that of a non-smoker 5-15 years after quitting. Risk of cancers of the mouth, throat, oesophagus decreases.
10 years	Risk of lung cancer death is about half that of a continuing smoker and continues to decline. Risk of cancers of the bladder, kidney and pancreas decreases.
15 years	Risk of coronary heart disease is the same as a non-smoker. The all-cause mortality in former smokers declines to the same level as people who have never smoked.

Source: Adapted from Zwar et al

Other benefits of quitting include:

- risk of having a low birth weight baby declines to normal if the mother quits before pregnancy or during the first trimester
- appearance of skin improves
- fitness improves
- money is saved – based on one \$10 pack of cigarettes per day in one year the cost of smoking is \$3,650 and over five years \$18,250.<sup>2</sup>

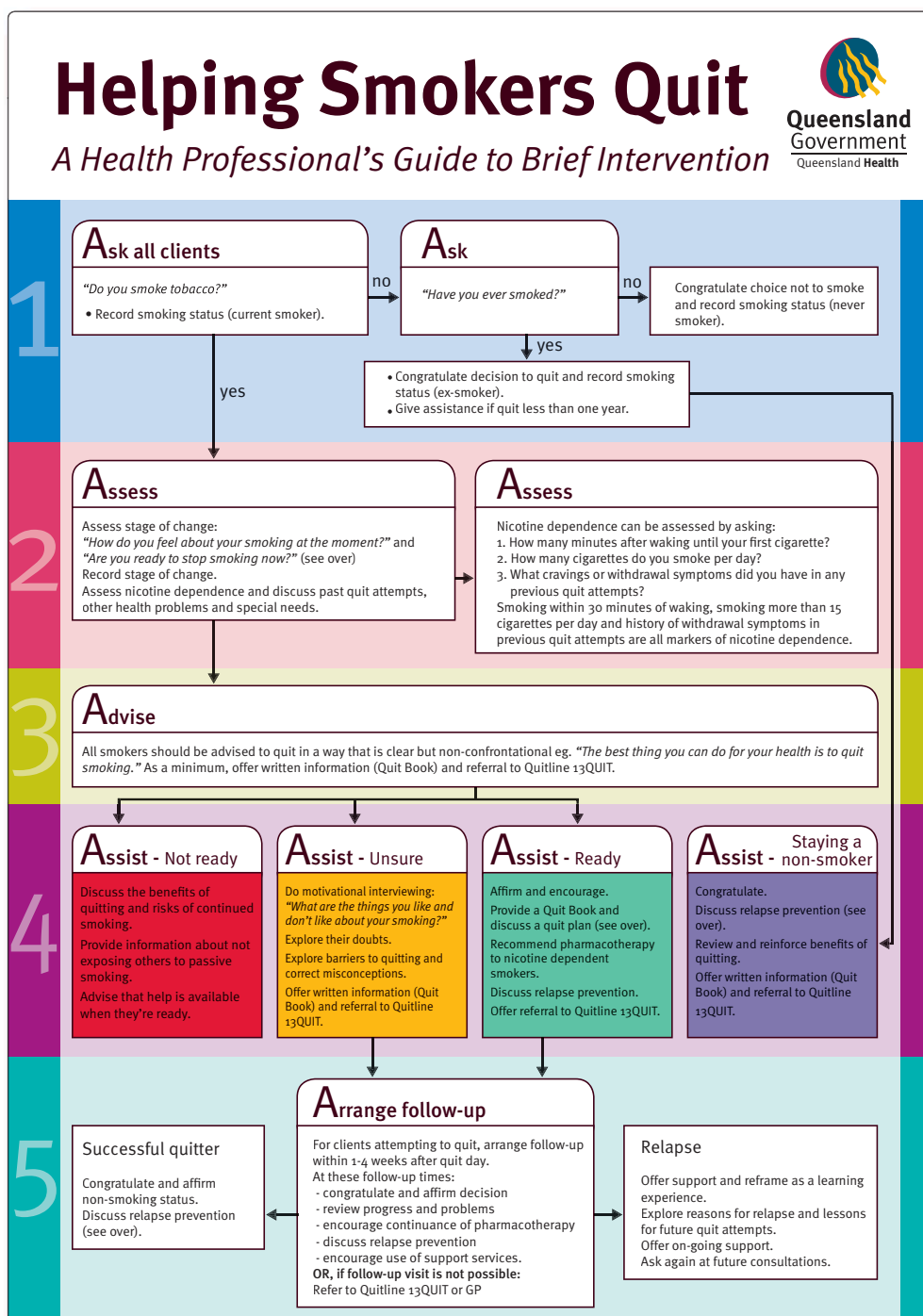
# QUIT SMOKING BRIEF INTERVENTION

Tobacco dependence is a chronic condition that usually requires repeated intervention.<sup>5</sup> Brief intervention is a practical way of providing frequent and useful assistance for smokers.

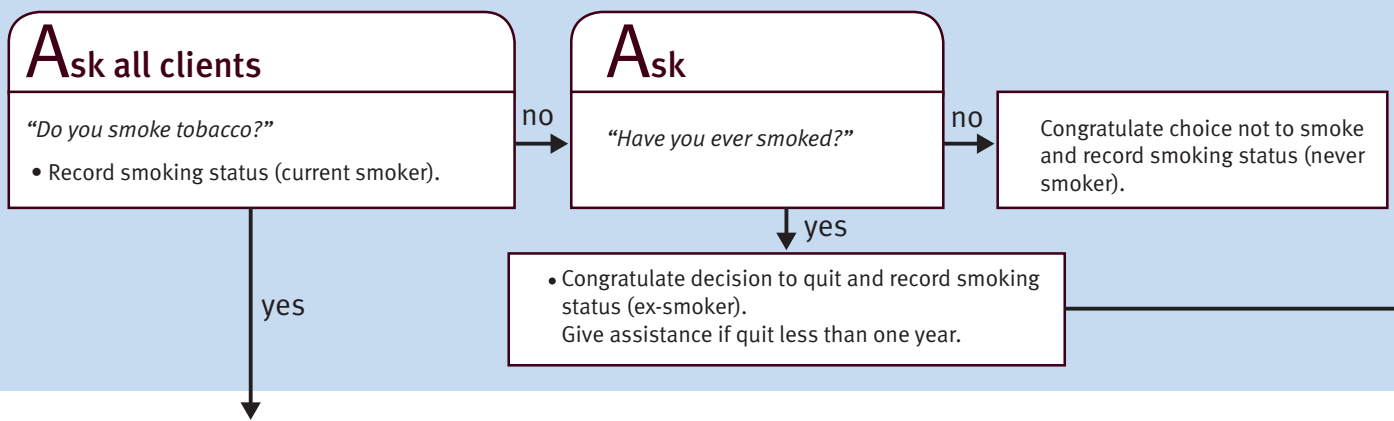
A range of quit smoking interventions is outlined in the GP Guidelines. This guide and accompanying chart focus on brief intervention, and in particular, the '5As'.

The '5As' is an evidence-based method for structuring quit smoking brief intervention in health care settings and includes Ask, Assess, Advise, Assist and Arrange follow-up.<sup>2</sup>

An enclosed chart (front shown below), provides summary information on the '5As' which may be of use as a quick reference or desk-top resource. The next sections of this guide provide explanation and background information for each component of the '5As'.







Self-report of smoking status is both reliable and valid.<sup>9</sup> If smoking status is unknown, all clients should be asked and smoking status recorded. Setting up a system to identify smoking status has been shown to be effective in prompting quit attempts and increasing quit rates.<sup>2</sup>

## Key questions to ask

*“Do you smoke tobacco?”*  
*“Have you ever smoked?”*

For a current smoker, a brief smoking history can be established as follows:

- number of cigarettes smoked per day
- previous quit attempts and what happened
- presence of smoking-related disease.<sup>2</sup>

For an ex-smoker, reaffirm their decision to quit and promote the benefits of staying a non-smoker. If they have been an ex-smoker for less than one year, discuss their coping strategies and relapse prevention. Information on relapse prevention is outlined in the ‘Assist – Staying a non-smoker’ section of this guide (page 25).

## Tips

Positively reinforce non-smoking, particularly with young people.

Never be judgemental about a client’s smoking status.

Remember the simple task of asking someone about their smoking can be enough to help motivate a quit attempt.



## Assess

Assess stage of change:  
 “How do you feel about your smoking at the moment?” and  
 “Are you ready to stop smoking now?” (see over)  
 Record stage of change.  
 Assess nicotine dependence and discuss, past quit attempts,  
 other health problems and special needs.

## Assess

Nicotine dependence can be assessed by asking:

1. How many minutes after waking until your first cigarette?
2. How many cigarettes do you smoke per day?
3. What cravings or withdrawal symptoms did you have in any 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 markers of nicotine dependence.

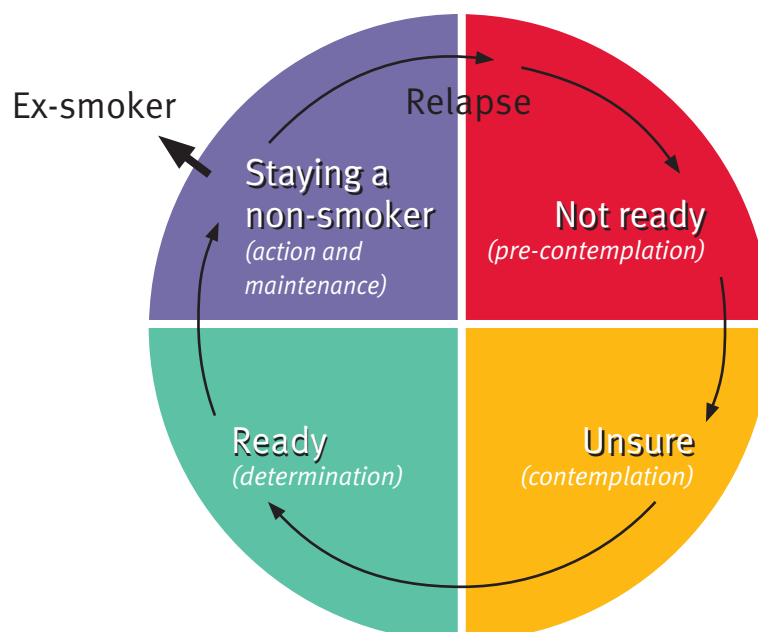
## ASSESS - Stages of Change

*Stages of Change* is a proven and useful tool for assessing a person’s readiness to change a variety of behaviours.<sup>2</sup> The original terms in the model have been simplified in the *Smokescreen* program to ‘not ready’, ‘unsure’ and ‘ready’, and these terms have been used in this guide.

The purpose of determining a person’s stage of change is to enable a health professional to deliver the most appropriate and beneficial assistance for a quit attempt.

Quitting smoking is a process occurring over time, rather than a single discrete event.<sup>2</sup> Smokers cycle through the stages of being ready, quitting and relapsing on an average of four to five times, before achieving long term success.<sup>2</sup> Success is defined as movement through the model, not just quitting.

### Stages of Change



Sources: Adapted from Prochaska and DiClemente 1983; Richmond et al 1991, 1998; Zwar et al 2004.

## Stages of Change

<b>Not ready</b>	These clients do not recognise their smoking as a problem, or are unconcerned about their smoking. 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.
<b>Unsure</b>	These smokers are ambivalent or uncertain about their smoking and are thinking about changing their behaviour. They may be apprehensive, possibly because they have tried in the past to quit and have failed. This group is particularly amenable to motivational interviewing.
<b>Ready</b>	These smokers are ready to change their behaviour and plan to quit within the next 30 days. They have usually made a quit attempt in the past year. This group is 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. This is the group most likely to ask for help with quitting.
<b>Staying a non-smoker</b>	<p><b>Action</b> - These smokers are actively quitting (i.e. they have quit in the past six months). This is when the risk of relapse is highest with about 75% of relapse occurring in this stage, mostly within the first week. The new ex-smoker is trying to lose their associations and triggers for smoking and establish themselves as a non-smoker. This is a period where support and strategies to prevent relapse are especially important.</p> <p><b>Maintenance</b> - These individuals have quit over six 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.</p>
<b>Relapse</b>	If relapse should occur, it is important for the client to see it as part of a learning experience and not as a failure. Relapse is common during the quitting process. A relapsed smoker should be encouraged and motivated to quit again.

Sources: Prochaska and DiClemente 1983; Richmond et al 1991, 1998; Zwar et al 2004.

### Key questions to ask

*“How do you feel about your smoking at the moment?”*

*“Have you ever thought of giving up smoking?”*

*“Do you think that you are ready to quit now?”*

*“How can I help to increase your confidence in quitting?”*

*“What would it take for you to quit?”*

Source: Richmond et al 1991, 1998

When assessing, it is important to express concern and interest, and not criticism or judgement.<sup>2</sup> Clarify responses by asking a client whether they want to make a quit attempt at this time or in the near future (eg. the next 30 days).<sup>3</sup>

Assessment also includes discussing barriers to quitting, triggers for smoking (eg. social situations, stress, negative emotions), social support and the smoker’s experience in previous quit attempts. Assessing previous use of pharmacotherapies is also helpful to determine if it was used optimally and what problems occurred.<sup>2</sup>

## ASSESS - Nicotine dependence

Assessment of nicotine dependence helps to predict whether a smoker is likely to experience nicotine withdrawal on stopping smoking.<sup>2</sup> Pharmacotherapy for dependent smokers is proven to double the chances of successfully quitting (see page 22).

Nicotine is the component of tobacco smoke responsible for physical dependence.<sup>2</sup> Nicotine is rapidly and extensively metabolised, and the smoker has a number of peaks and troughs of nicotine throughout the day. This promotes dependence as the smoker tends to experience early withdrawal effects such as craving and irritability when nicotine levels decrease.<sup>2</sup>

Nicotine withdrawal symptoms, which can also be described to clients as recovery symptoms, commonly include:

- cravings (which can be strong, but typically come in bursts which only last a short time)
- feelings of irritability, frustration, depression or anxiety
- feelings of restlessness and/or difficulty concentrating
- changed sleep patterns
- increased appetite and weight gain.<sup>2</sup>

Nicotine withdrawal symptoms are at their worst in the first 24 to 48 hours and typically resolve over 10 to 14 days but can last up to four weeks, and the triggers associated with smoking can persist for years.<sup>2</sup>

### Key questions to ask

1. *“How many minutes after waking until your first cigarette?”*
2. *“How many cigarettes do you smoke per day?”*
3. *“What cravings or withdrawal symptoms did you have in any 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 markers of nicotine dependence.<sup>2</sup>

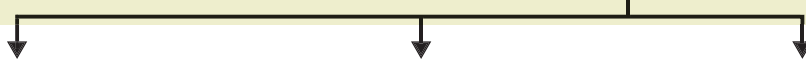
Clients who have had nicotine withdrawal symptoms on previous quit attempts are likely to experience them again in future attempts.<sup>2</sup>

Source: Zwar et al 2004.



## Advise

All smokers should be advised to quit in a way that is clear but non-confrontational eg. *"The best thing you can do for your health is to quit smoking."* As a minimum, offer written information (Quit Book) and referral to Quitline 13QUIT.

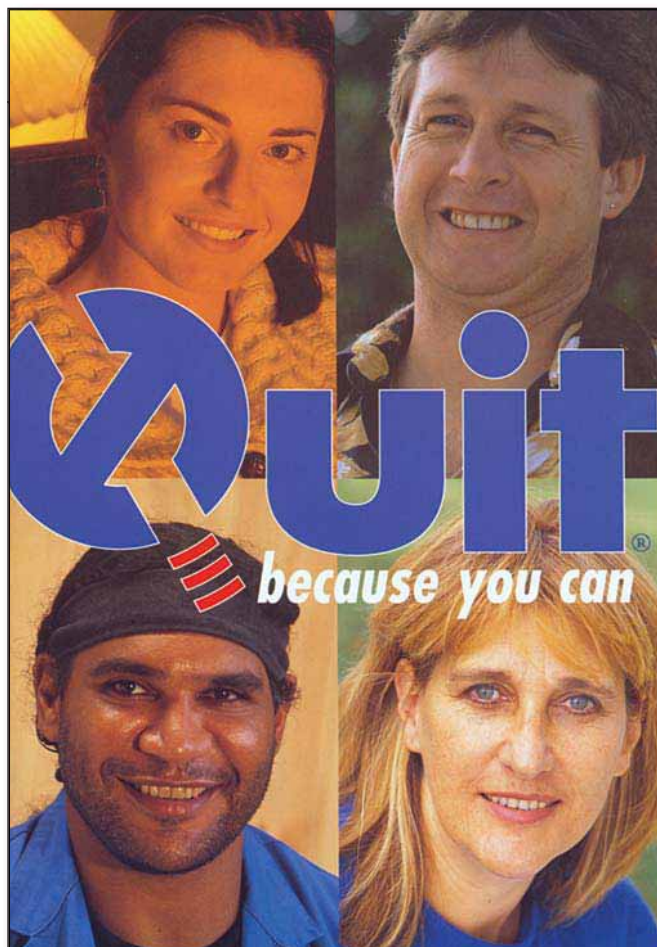


Brief, repetitive and positive reminders to quit smoking, including positive reinforcement of a recent quit attempt, can improve quit rates. Quit smoking advice is useful whatever stage of change the client is currently in. Use messages that are clear, strong, personalised, supportive and non-judgemental.<sup>10</sup>

Where possible personalise the benefits of quitting smoking. Examples are improvement in other illnesses, importance of smoking as a risk factor for future illness, not exposing others (including children) to passive smoking, importance as a role model to children, and saving money.<sup>2</sup>

Copies of the Quit Book are available using the Resource Order Form at the back of this guide.

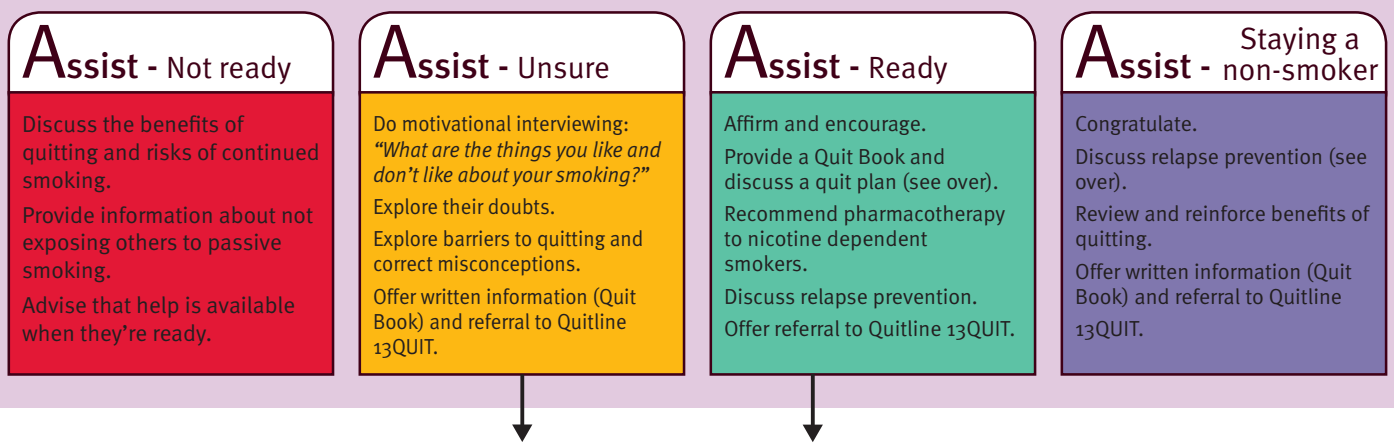
Referral to Quitline can be via the Quitline Referral Form at the back of this guide, or by simply providing the Quitline telephone number (13QUIT) to clients.



### The 'Quit Book'

A new look Quit Book will be available from mid-2006





The decision on what assistance to provide depends on the needs and preference of the client. The assistance offered should match the client's stage of change (see also page 13).

## ASSIST - Not ready

For smokers who do not want to quit:

- note in their client record that you have discussed their smoking and the benefits of quitting
- discuss their smoking and the benefits of quitting at next visit or contact
- discuss the effects of exposure to passive smoking and encourage them to smoke away from children and outside the car and home.

Remind smokers of the importance of quitting smoking by displaying quit smoking information and posters at your service.

## ASSIST - Unsure

For health professionals with very little time available, the offer of written information (eg. Quit Book) and referral to Quitline 13QUIT (13 7848), is the best assistance for smokers who indicate they are unsure.

Copies of the Quit Book are available using the Resource Order Form at the back of this guide.

Referral to Quitline can be via the Quitline Referral Form at the back of this guide, or by simply providing the Quitline telephone number.

## Motivational interviewing

Motivational interviewing is a proven method for working with a person's ambivalence and helping them to explore *their* reasons for change or non-change. It also involves exploring the competing forces between a person's ongoing smoking and their desire to change.<sup>11</sup> Motivational interviewing involves open-ended questions, reflective listening and summarising.<sup>2</sup>

Key principles of motivational interviewing include:

1. Expressing empathy. Reflect and validate feelings, and take a non-judgemental approach.
2. Developing discrepancy. Highlight the difference between positives and negatives as well as any inconsistency between behaviour and beliefs.
3. Avoiding argumentation. The client, not the health professional, is encouraged to argue for change.
4. Rolling with resistance. Confrontation with a client will only create defensiveness.
5. Supporting self-efficacy. The person's confidence in their ability to implement and sustain changed behaviour will influence whether or not they attempt and persist with efforts to change.<sup>9</sup>

In motivational interviewing the health professional should:

- personalise the intervention, ultimately the client presents the argument for change
- be positive and demonstrate your own belief that people can change
- understand that the client takes responsibility for decisions and consequences.<sup>2</sup>

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

- helping them to weigh up the pros and cons of smoking (good things and less good things)
- asking clients to rate their motivation and confidence in quitting
- discussing health effects of smoking and benefits of quitting.<sup>2</sup>

The following sample questions are a guide for undertaking motivational interviewing. Although these questions are grouped under 'steps', it is important to focus on motivational interviewing as a style and conversation, rather than progressing through a set of clearly defined steps.<sup>11</sup> Sometimes it may be that only a few steps are covered in an interview.

Step	Sample questions for motivational interviewing
1. Good things	<ul style="list-style-type: none"> <li>• What are the things you like about your smoking?</li> <li>• What would you miss if you weren't smoking?</li> </ul>
2. Less good things	<ul style="list-style-type: none"> <li>• On the flip side – what are the things you don't like about your smoking?</li> <li>• What are the things you wouldn't miss?</li> <li>• How do you feel about these less good things?</li> <li>• Do you have any concerns about your smoking?</li> </ul>
3. Future	<ul style="list-style-type: none"> <li>• How would you like things to be in the future?</li> <li>• If things were different, what would you be doing?</li> <li>• Ask the miracle question – If a miracle happened tonight, how would things be in the morning?</li> </ul>
4. Current behaviour	<ul style="list-style-type: none"> <li>• How would you describe things at the moment?</li> </ul>
5. Highlight the discrepancy	<ul style="list-style-type: none"> <li>• How does your smoking fit in with how things are going now? (and with your goals?)</li> <li>• How would things be in a year if you stayed the same?</li> <li>• I'm confused. On one hand you are saying ... yet on the other you are saying ...</li> <li>• How does this fit together?</li> </ul>
6. Summarise	<ul style="list-style-type: none"> <li>• Let's see, so far you've said ...</li> <li>• Where does that leave us now?</li> <li>• What would you like to see happen with your smoking?</li> <li>• What will be your next (or first) step?</li> </ul>

Source: Adapted from Winchester et al 2004.

Asking clients to rate their motivation and confidence in quitting on a scale of 1 to 10 can also be helpful. 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.<sup>2</sup>

Information on the health effects of smoking and benefits of quitting are outlined on pages 7 and 8.

## Barriers to quitting

Concerns or barriers to quitting are important for all smokers.<sup>2</sup> An informed discussion can be very helpful to assist smokers to overcome these, by providing information and correcting misconceptions.<sup>2</sup> Common barriers to quitting are discussed below.

Withdrawal symptoms	Most regular smokers will experience symptoms of nicotine withdrawal on quitting. Cravings for cigarettes and irritability are two of the most common symptoms. Withdrawal symptoms may be lessened or prevented by using NRT or Bupropion Hcl. It is important to reinforce that withdrawal can be intense at first and then lessen over time. The symptoms are also a positive sign that the body is healing.
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. There is evidence that nicotine dependence increases stress, due to the effect of short-term withdrawal symptoms, like anxiety and irritability. Smokers may benefit from exploring other ways of coping with stress and learning to relax such as progressive muscle relaxation and breathing techniques.
Fear of failure	Relapse is a common feature of the quitting process and most smokers have tried and relapsed four to five times before finally becoming successful non-smokers. Smokers should be encouraged to view each quit attempt 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.
Peer and 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 people, it can be helpful to rehearse how to say no to a cigarette offer.
Weight gain	This is a very important barrier, especially for women. 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 using either NRT or Bupropion Hcl. Advice to reduce weight gain includes: a balanced diet that includes plenty of fruit and vegetables and avoidance of high-fat and high sugar foods, drinking water or low-calorie drinks as a substitute for snacking, regular physical activity, and identifying eating triggers and learning new ways to cope with them.

Source: Zwar et al 2004

## ASSIST - Ready

For smokers who are ready to quit:

- congratulate and encourage their decision to quit
- review and reinforce benefits of being a non-smoker
- discuss a quit plan
- recommend pharmacotherapy to nicotine dependent clients, remembering that the use of pharmacotherapy is proven to double the chances of successfully quitting
- offer written information such as the Quit Book
- discuss relapse prevention (see page 25)
- offer referral to Quitline 13QUIT (13 7848).

### *Quit plan*

Smokers who plan before they quit are more successful than those who don't. A smoker's quit plan can include:

- setting a realistic quit date and sticking to it
- identifying why and where you smoke and what 'triggers' you to want to smoke
- considering the use of pharmacotherapy
- developing coping strategies for trigger situations
- writing out a list of reasons for quitting and displaying these in prominent positions (eg. fridge, car)
- finding a 'Quit Buddy' to encourage and support each other
- telling everyone you are quitting – you are going to need their support
- checking your house, car, workplace etc, and throwing out cigarettes, lighters and ashtrays, the day before quit day
- setting incremental goals and rewarding yourself for not smoking.<sup>2</sup>

### *Pharmacotherapy*

The rate of success in unaided quit attempts is low. In most cases it is better to encourage clients to use a form of pharmacotherapy in the first instance rather than to wait to see if they can succeed unaided.

It is important to undertake a comprehensive approach to quitting smoking, so that pharmacotherapy is not considered as a stand alone treatment.<sup>9</sup>

Treatment with nicotine replacement therapy or drugs such as Bupropion Hcl sustained release (tradename Zyban®), is an effective aid to assisting motivated smokers to quit.<sup>2</sup> Motivated smokers are in the 'Ready' or 'Staying a non-smoker' stages of change (see page 14).

### *Nicotine replacement therapy (NRT)*

The aim of NRT is to replace some of the nicotine from cigarettes without the harmful constituents found in tobacco smoke, thus reducing withdrawal symptoms.<sup>2</sup> This then allows the smoker trying to quit to concentrate on behavioural aspects of their smoking. Evidence indicates that the best results in terms of long-term quitting are achieved when the use of NRT is combined with behavioural advice and follow-up.<sup>2</sup>

NRT, which includes the transdermal patch, gum, inhaler, lozenge and sublingual tablet, increases quit rates at five to 12 months approximately two-fold compared with placebo and regardless of the setting.<sup>2</sup>

The gum and inhaler permit more control over the dose and how quickly it is obtained. The inhaler delivers a quick bolus of nicotine and resembles a cigarette, thus may be useful for people who want a substitute for the act of smoking itself.<sup>12</sup>

## Nicotine replacement therapy initial dosing guidelines

	<b>C</b> urrent use	<b>D</b> ose	<b>D</b> uration	<b>C</b> ontraindications (MIMS online 2005)
Patch	< 10 cigarettes per day or weight < 45kg or Cardiovascular Disease	14mg/24 hr patch or 10mg/16 hr patch	8 weeks or greater	Non-smokers; recent MI, CVA; unstable Prinzmetal angina; severe arrhythmias; generalised skin disease; children; pregnancy, lactation.
(Unscheduled)	> 10 cigarettes per day and weight > 45kg	21mg/24 hr patch or 15mg/16 hr patch	8 weeks or greater	
Gum	> 10 and < 20 cigarettes per day	2mg gum, 8-12 per day	8 weeks or greater	Non-smokers; recent MI; unstable, progressive angina pectoris; Prinzmetal variant angina; severe cardiac arrhythmias; acute phase stroke; children; pregnancy, lactation.
(Unscheduled)	> 20 cigarettes per day	4mg gum, 6-10 per day	8 weeks or greater	
Inhaler	> 10 cigarettes per day	6-12 cartridges per day	12 weeks or greater	Non-smokers; hypersensitivity to menthol; recent MI; unstable, progressive angina pectoris; Prinzmetal angina; severe cardiac arrhythmias; acute phase stroke; children; pregnancy, lactation.
(S2)				
Lozenge	First cigarette > 30 mins after waking	2mg lozenge, 1 lozenge every 1-3 hrs	8 weeks or greater	Non-smokers; Phenylketonuria; unstable angina; Prinzmetal angina; severe arrhythmias; recent MI, stroke; children; pregnancy, lactation.
(Unscheduled)	First cigarette < 30 mins after waking	4mg lozenge, 1 lozenge every 1-2 hrs	8 weeks or greater	
Sublingual tablet	Low dependence	2mg tablet every 1-2 hrs initially	8 weeks or greater	Non-smokers; recent MI; unstable, progressive angina pectoris; Prinzmetal angina; severe cardiac arrhythmias; acute phase stroke; children; pregnancy.
(Unscheduled)	High dependence	2 x 2mg tablets every 1-2 hrs initially	8 weeks or greater	

Source: Adapted from Zwar 2004

Transient local itching, burning or redness of the skin, or sleep disturbance including insomnia or vivid dreaming can occur with the nicotine patch. Patches should be applied to dry non-hairy skin above of the waist, with the site rotated daily. The patch can be removed at night, however absorption of nicotine continues for up to two hours after removal. Use of nicotine gum may cause gastrointestinal disturbances, dyspepsia, nausea, headaches or jaw pain. People with dentures should not use the gum. Refer to MIMS for full product information including adverse reactions and overdose.

### Tip

It is important to ensure that clients use NRT for at least eight weeks. There is a risk that people may find their withdrawal symptoms have substantially reduced after 2-3 weeks, not realising that this effect is due to the action of the NRT. They may believe they no longer need to use NRT and discontinue use prematurely, thus risking relapse to smoking.

## Bupropion Hcl

Bupropion Hcl (trade name Zyban®) is an oral medication which is used initially while the person is still smoking and the quit date is set within the second week. Its mechanism of action is presumed to be mediated by its capacity to block neural re-uptake of dopamine and/or noradrenaline. It is only available on prescription and is included on the Pharmaceutical Benefits Scheme. Refer to MIMS for full product information including adverse reactions and overdose.

### Dosage and administration of Bupropion Hcl

Type	Dose and duration			Side effects	Contraindications
	< 10 cigarettes per day	10-20 cigarettes per day	> 20 cigarettes per day		
Bupropion Hcl	150 mg for 3 days, then 150 mg b.d. for 7 weeks			Headaches, dry mouth, impaired sleep, seizures, nausea, constipation, anxiety, and dizziness	Seizure disorders or significant risk of seizures; bulimia; anorexia nervosa; bipolar disorders ; children

Source: National Centre for Education and Training on Addiction (NCETA) Consortium 2004

### Combination therapy

Combining two forms of NRT (patch, gum, lozenge, sublingual tablet or inhaler) or combining Bupropion Hcl with any form of NRT can be more effective than a single form of therapy.<sup>2 13</sup> Clients should be encouraged to use combined treatments if they are unable to remain abstinent, or if they are still experiencing withdrawal symptoms using a single type of pharmacotherapy.<sup>2</sup>

#### Tip

Underdosing of NRT is common. Advise clients on correct dosage and to use combined therapy if they find use of one treatment only is not managing their nicotine withdrawal.

### Pharmacotherapy and pregnant and lactating women

Reproductive health is harmed by smoking tobacco in both men and women. There is conclusive evidence that smoking causes compromised fertility, and that parental smoking potentially has long-term and serious consequences for child health. Smoking while pregnant contributes to an increased risk of a broad range of obstetric complications, including ectopic pregnancy, spontaneous abortion, pregnancy and labour complications, stillbirth, low birth weight babies and sudden infant death syndrome (SIDS).<sup>5</sup>

Exposure to environmental tobacco smoke is also a known risk factor for SIDS, asthma, and lower respiratory disease in children.<sup>14</sup>

Pregnancy is a time when many women are motivated to improve health behaviours, including quitting smoking, and they are in regular contact with health professionals. Although quitting before or early in pregnancy will produce the greatest benefits to the mother and the foetus, stopping smoking at any point in the pregnancy is beneficial. Quit smoking programs of various types are effective at achieving smoking cessation in pregnant women. Effective smoking cessation interventions should be offered to pregnant smokers at the first antenatal visit and throughout pregnancy and post-partum. Extended psychosocial interventions that exceed minimal advice to quit should be made available for pregnant women.<sup>5</sup>

Although pregnant and lactating women are contraindicated for NRT, it is recommended that they are still assessed and advised to quit smoking due to significant risk factors. While it is always preferable for a pregnant woman to avoid unnecessary medication, 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 NRT and potential continued smoking. The level of nicotine obtained from NRT is lower than that obtained from smoking and there is no exposure to carbon-monoxide and the other 4000+ chemicals in tobacco smoke.<sup>12</sup>

The safety of the transdermal patch during pregnancy has not been established. If the clinician or the pregnant or lactating patient decides to use NRT to quit smoking, delivery systems should be considered that yield intermittent, rather than continuous nicotine exposure (i.e. inhaler, gum, lozenge or sublingual tablet, rather than transdermal patch) due to potential neurotoxicity in the foetus of continuous exposure to nicotine.<sup>15 16</sup>

## ASSIST - Staying a non-smoker

The term “Staying a non-smoker” is used in this guide to maintain consistency with Queensland Health’s *SmokeCheck* program (see page 7), and to simplify terminology. In the GP Guidelines and elsewhere, this stage is referred to as “action” and “maintenance”.

For smokers who have recently quit:

- congratulate, and suggest that they think of themselves as a non-smoker from the moment they quit
- review and reinforce benefits of being a non-smoker
- review and discuss their quit plan, eg. “what is going well about giving up smoking?”, “what is not going so well about quitting?”
- if used, ask about pharmacotherapy, eg. “any problems or skin irritations?”
- remind them that Quitline is available for follow-up support
- suggest increased physical activity and healthy eating
- assist with relapse prevention strategies.

### Relapse prevention

Relapse prevention focuses on identifying and managing potential difficulties to minimise the risk of relapse. Many relapse prevention strategies are a continuation of strategies developed during the ‘Assist - Ready’ section of this guide (see page 22), eg. having a quit plan, identifying high risk situations and alternatives, managing cravings and problem solving.<sup>11</sup> Relapse prevention strategies are discussed below.

1. Information about relapse. The more someone is aware of the possibility of relapse and understands the nature of withdrawal and relapse, the better they can manage situations.
  - Describe what relapse means, what relapse is etc. Identify the signs of a relapse.
  - Describe the withdrawal process. When a person knows what to expect, it can be easier for them to cope with the withdrawal symptoms (physical and psychological).
  - Normalise the risk of relapse without prescribing it. Raise awareness of the risk without making it seem ‘okay’ or suggesting that ‘it will happen’.

2. Skill development. With the client, explore and develop practical coping strategies.
  - This may include rehearsing refusal skills, practicing relaxation and managing mood states such as depression, anxiety and anger. Practicing these skills in the counselling environment enables the person's confidence and ability in applying the strategies in 'real life' situations to increase.
3. Lifestyle. Look at other lifestyle issues that are important in maintaining changes (ie. identify rewards for not smoking and alternatives for managing problems/stress/conflict). Support and problem solve with the client how to identify different moods and emotions, and active coping strategies to manage these moods and situations.
4. Identify support systems – people, places and services.
5. High-risk situations and triggers. High-risk situations and environments are those which make a person more vulnerable to the cues or pressures that activate urges and cravings and lead to relapse. These cues or pressures are known as triggers. They may be external or internal factors, eg. people, places, times, thoughts, feelings, moods or behaviours.
  - High-risk situations can take the form of certain ways of thinking, feeling or acting that make people more susceptible to triggers that might be present.
  - Review high-risk situations and coping strategies. Affirm ways that these situations have already been handled. Explore practical problem solving and coping strategies to manage these situations.
  - Using a problem solving and brainstorming approach, try to determine practical coping strategies. Eg. *"How would you manage being in a bar with your friends who smoke? What do you think you would do?"*
6. Affirm positive changes already made. Emphasise optimism and belief in change.
  - Highlight and review successes to date. Eg. *"You have maintained these changes for the last four days. How are you feeling about your success so far? How have you managed risky times so far?"*
7. Warning signs. Relapse does not just happen 'out of the blue' but can be anticipated. It occurs because people either fail to recognise or choose to ignore the warning signs of an approaching high-risk situation.
  - Think about situations that have led to relapses in the past. What factors in those situations triggered smoking?
  - Make a list of high-risk situations and triggers that could lead to relapse in the future. Regularly review the list and use it to keep vulnerability as low as possible.
  - Monitor functioning in the areas of thoughts, feelings and behaviour. Be vigilant and watch out for warning signs of high-risk situations. Encourage the person to avoid those situations if possible.
  - It is not always possible to avoid some high-risk situations, eg. feeling upset, having money worries, being present at social occasions where smoking is occurring, etc. If necessary, take action to prevent triggers being activated. Be prepared to intervene with problem-solving strategies if necessary.
  - Anticipate problems and plan ahead. Think about possible difficulties or pitfalls that might arise and work out ways of coping with them in advance.
8. The 'relapse drill'. A relapse drill is an action plan that helps to prevent or limit the damage caused by relapse. Like a fire drill, it prepares the person to act safely, effectively and positively in the event of a threat or disaster.
  - What is the relapse drill? Write down a few strategies (eg. What to do, where to go, who to call for support) that could help to manage a high-risk situations where there is a real danger of lapse or relapse. Keep this list handy at all times to refer to when necessary.
  - The relapse drill should be relevant and realistic. It should be detailed and specific, not vague or general, and it should cover the areas of thoughts, emotions and behaviours.<sup>11</sup>

## Coping strategies

Don't have 'just one' cigarette, because it usually leads back to regular smoking.

Ask people not to smoke around you and never buy, hold or light cigarettes for others.

Do something active when the urge hits.

Change your routine so that you have got something else to do at the times and places you used to smoke.

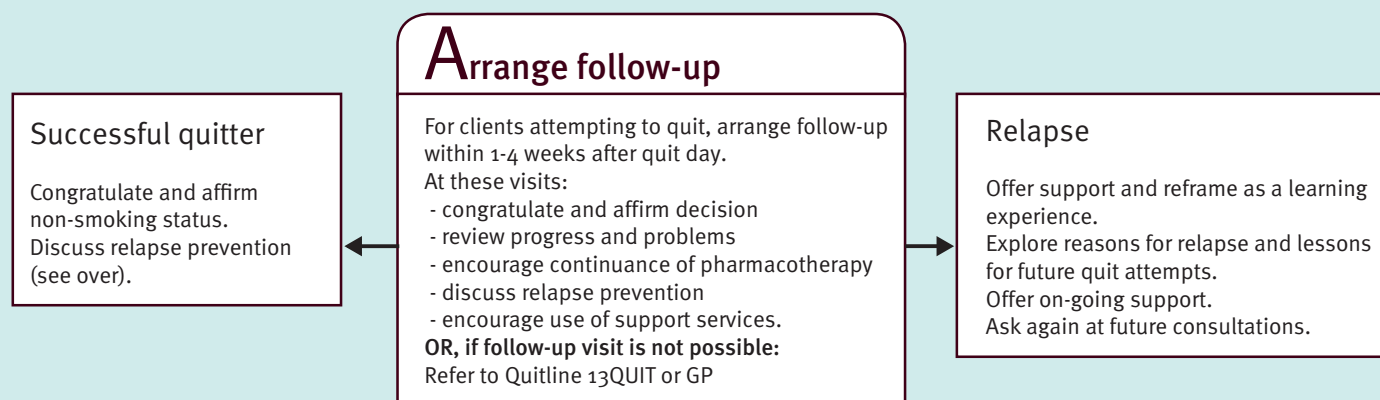
Use pharmacotherapy where indicated (nicotine replacement therapy, Bupropion Hcl).

Ring Quitline 13QUIT (13 7848) for support.

Reward yourself. Congratulate yourself every time you beat the urge to smoke.

Remember to treat yourself occasionally with the money you've saved by not smoking.





## FOLLOW-UP

Follow-up visits after assistance to quit have been shown to increase the likelihood of successful long-term abstinence.<sup>17 18</sup> Actions during follow-up contact can include the following.<sup>2</sup>

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
- discuss relapse prevention.

If a planned quit attempt has not been made:

- explore reasons for delay
- explore ambivalence and help build motivation to reach the stage of readiness to try
- encourage client to set a quit day.

If not smoking:

- congratulate, praise and affirm non-smoking status
- review progress and problems
- encourage completion of full course of current pharmacotherapy
- discuss coping strategies and relapse prevention.

## Relapse

Quitting is a dynamic and continuing process often involving repeated attempts rather than a discrete event.<sup>2</sup> 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), often occurring at times of stress, in social situations and can be accompanied by alcohol.<sup>2</sup> A relapse is considered to be a return to regular smoking. Most successful ex-smokers have tried and relapsed four to five times before finally succeeding.

Should your client relapse, help them to refocus on wanting to quit, regain abstinence and develop strategies to avoid further slips. Use open-ended questions to help the client to identify what precipitated the relapse and encourage active discussion to identify strategies to overcome this.

Problems could include:

- lack of support to quit
- no quit plan
- negative mood or depression
- lack of confidence
- strong or prolonged withdrawal symptoms
- weight gain
- flagging motivation / feeling deprived.<sup>2</sup>

Information on relapse prevention is outlined in the 'Assist - Staying a non-smoker' section of this guide (page 25).

## Tips

The risk of relapse is highest in the first week after a quit attempt. 75% of relapses occur in the first six months.

If a lapse during a quit attempt occurs, support your client and reaffirm their ability to quit. Ask open-ended questions to help them identify why the lapse occurred and develop strategies to prevent another lapse or before there is a full relapse to regular levels of smoking.

If full relapse has occurred, encourage the client to set another quit date and provide information on Quitline 13QUIT.

## References

1. Letcher T, Black C, Lipscombe J, Wakefield M, Durkin S. 2004 *Would Victorian Smokers Find it easier to Quit if Bars and Pubs Were Smoke-free?* Centre for Behavioural Research in Cancer. Research Paper Series No 10. Melbourne, Cancer Council of Victoria.
2. Zwar N, Richmond R, Borland R, Stillman S, Cunningham M, Litt J. 2004 *Smoking Cessation Guidelines for Australian General Practice*. Canberra, Commonwealth Department of Health and Ageing. [Available online at [www.quitnow.info.au](http://www.quitnow.info.au)].
3. Richmond R, Webster I, Elkins L, Mendelsohn C, Rollnick S. 1991 *Smokescreen for the 1990s: A stop smoking programme for General Practitioners to use with smokers*, NSW Department of Health, 2nd Edition.
4. Prochaska JO, DiClemente CC. Stages and processes of self-change in smoking: towards and integrative model of change *Journal of Consulting and Clinical Psychology* 1983;51:390-395.
5. Miller M, Wood L. 2001 *Smoking Cessation Interventions Review of evidence and implications for best practice in health care settings*. Canberra, Australian Government, Department of Health and Ageing.
6. Richmond R, Mendelsohn C. 1998 Physicians' views of program incorporating stages of change to reduce smoking and excessive alcohol consumption, *American Journal of Health Promotion* 12 (4):254-7.
7. Silagy C, Stead LF, 2003 Physician advice for smoking cessation (Cochrane Review), in the *Cochrane Library*, Issue 1, Oxford: update software.
8. U.S. Department of Health and Human Services. 2004 *The Health Consequences of Smoking: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centres for Disease Control and Prevention, National Centre for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2004.
9. National Centre for Education and Training on Addiction (NCETA) Consortium. 2004 *Alcohol and Other Drugs: A Handbook for Health Professionals*. Department of Health and Ageing, Australian Government. [Available online at [www.aodgp.gov.au/professional/handbook.htm](http://www.aodgp.gov.au/professional/handbook.htm)].
10. New Zealand National Health Committee. 2002 *Guidelines for Smoking Cessation*. Wellington, New Zealand National Health Committee. [Available online at [www.nzgg.org.nz/index.cfm](http://www.nzgg.org.nz/index.cfm)].
11. Winchester, V., Kelly, J. and Sander, K. 2004 *Bridging the Gap: Young People & Drug Use... A Worker's Guide*. Alcohol and Drug Service, Youth Community Team, The Prince Charles Hospital Health Service District, Queensland Government.
12. New South Wales Department of Health. 2002 *Guide for the Management of Nicotine Dependent Inpatients: Summary of Evidence*. Sydney, NSW Health Department. [Available online at [www.health.nsw.gov.au/pubs/g/pdf/nicotine\\_sum.pdf](http://www.health.nsw.gov.au/pubs/g/pdf/nicotine_sum.pdf)].
13. Fiore MC, Bailey WC, Cohen SJ, et al. Treating Tobacco Use and Dependence. *Clinical Practice guideline*. 2000 Rockville, MD, US Department of Health and Human Services. Public Health Service.
14. Ridolfo B, Stevenson C. 2001 *The quantification of drug-caused morbidity and treatment in Australia, 1998* (Drug Statistics Series No 7). Canberra, Australian Institute of Health and Welfare.
15. Benowitz NL. Nicotine Replacement Therapy During Pregnancy. *JAMA* 1991;266:3174-3177.
16. Dempsey, DA and Benowitz, NL. Risks and Benefits of Nicotine to Aid Smoking Cessation in Pregnancy. *Review Drug Safety* 2001; 24 (4): 277-322.
17. Richmond, RL, Austin A, Webster IW. Three year evaluation of a programme by general practitioners to help patients stop smoking. *British Medical Journal* 1986; 292:803-806.
18. Richmond RL, Makinson RJ, Kehoe LA, Giugni AA, Webster IW. One-year evaluation of three smoking cessation interventions administered by general practitioners. *Addictive Behaviours* 1993; 18: 187-199.