

# MANAGING NICOTINE DEPENDENCE:

A GUIDE FOR NSW  
HEALTH STAFF



Health

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## SECTION ONE

# Background information

### Policy context

There has been a significant decline in smoking rates in NSW over recent decades. Despite this, smoking remains a leading cause of death and disability in NSW, accounting for around 5,300 deaths (1) and 46,000 hospitalisations each year. (2) Half of all long-term smokers will die prematurely because they smoked. (3) The social costs of tobacco use in NSW are high, estimated in 2006/07 at \$8.4 billion annually with many of these social and personal costs borne by the most disadvantaged members of the population. (4)

The *NSW 2021 Plan* (5) sets robust targets on reducing smoking in order to decrease chronic disease and combat rising health costs. The *NSW 2021 Plan* states that the NSW Government will:

- Reduce smoking rates by 3% by 2015 for non-Aboriginal people and by 4% for Aboriginal people by 2015; and
- Reduce the rate of smoking by non-Aboriginal pregnant women by 0.5% per year and by 2% per year for pregnant Aboriginal women.

The *NSW Tobacco Strategy 2012–2017* (6) sets out the actions that the NSW Government will take to reduce the harm which tobacco imposes on our community and achieve the *NSW 2021 Plan* targets. The *NSW Tobacco Strategy* outlines the importance of evidence-based smoking cessation services in supporting smokers to quit. These cessation services include telephone counselling, online services, workplace programs, specialised cessation services and brief interventions provided by professionals working in the health, social and community sectors.

The *NSW Smoke-free Health Care Policy* (The Policy) emphasises the important role of the health care sector in reducing the risks to health associated with tobacco use by clients, staff and visitors to NSW Health facilities and the community's exposure to second-hand smoke. The Policy outlines the mandatory requirements in relation to smoke-free health service buildings, vehicles and grounds and the provision for Local Health Districts (LHDs) and speciality network governed statutory health corporations to enact by-laws for smoke-free

outdoor areas. The Policy can be accessed from the NSW Health website:

[www.health.nsw.gov.au/policies/a-z/s.asp](http://www.health.nsw.gov.au/policies/a-z/s.asp)

### Purpose

The primary purpose of this Guide is to support NSW Health staff to provide effective, evidence-based treatments for nicotine dependent clients including routine brief interventions for smoking cessation to all clients who smoke or are recent quitters. Settings include all NSW Health facilities – hospital inpatient and outpatient facilities, primary and community care, dental, eye care and pharmacies.

This document will be updated regularly to ensure the information remains current. The latest version of the Guide is available on the NSW Health website at: [www.health.nsw.gov.au/publications/Pages/publications.aspx](http://www.health.nsw.gov.au/publications/Pages/publications.aspx)

NSW Health staff have an important role to play in encouraging and supporting cessation among smokers. Clients who smoke are more likely than non-smokers to require health care treatments for acute and or chronic illness and therefore more likely than non-smokers to be receiving health care. (7)

The World Health Organization (WHO) recognises the prominent role of all health professionals in assisting smokers to quit. (8) It recommends that all health care premises and their immediate surroundings be smoke-free and that all health care personnel and clinicians consistently deliver smoking cessation interventions to health care clients. This should include asking about and recording smoking status prior to, or on admission to hospital and at every visit in other settings and offering brief advice and pharmacotherapy and referral to specialist support to those who need it. NSW Health supports the WHO view on the actions that need to be taken to support best practice smoking cessation.

## Prevalence of smoking in NSW

### Rate of current smoking in adults aged 16 years and over

The NSW Adult Population Health Survey is a self-reported survey, conducted every year, using computer-assisted telephone interviewing (CATI). Respondents are asked about their smoking status.

Over the period 2002 to 2011, the rate of current smoking significantly declined from 21.2 per cent to 14.7 per cent. In 2012 mobile phones were included in the survey methods for the first time and this increased the number of younger people and males in the survey sample. Both of these groups have relatively higher smoking rates, which lead to a higher overall reported rate of current smoking in 2012 compared to the previous year (17.1 per cent in 2012 compared to 14.7 per cent in 2011). The rate declined in 2013 to 16.4 per cent.

For current and detailed information on smoking prevalence in NSW (by year, sex, gender, LHD, Aboriginality, pregnancy, socio-economic status and more) visit Health Statistics New South Wales at [www.healthstats.nsw.gov.au](http://www.healthstats.nsw.gov.au)

### Smoking prevalence amongst young people (12-17 years)

The NSW School Students Health Behaviors Survey is conducted in NSW schools every 3 years to provide information about the health behaviours and attitudes of secondary school students. A number of questions are asked in relation to smoking behavior.

The results of the survey data over an extended period have shown a significant decline in the proportion of secondary school students who are current tobacco smokers (27.3 per cent in 1984 to 7.5 per cent in 2011). Despite this decrease, adolescence is still the most common time for tobacco smoking to be initiated. Intermittent or occasional smoking during adolescence is associated with a greater likelihood of becoming addicted to nicotine and of progressing to smoking on a daily basis, compared with experimentation in adulthood. About three quarters of teenagers who smoke regularly will continue smoking as adults. Those who start smoking as teenagers tend to smoke for longer and smoke more heavily than those who adopt smoking at a later age. This leads to a much higher risk of developing tobacco-related disease. (9)

### Smoking rates during pregnancy

Smoking has a negative impact on the health of both the mother and the unborn child. The proportion of mothers reporting any smoking during pregnancy has slowly declined in recent years. However, the proportion of Aboriginal mothers in NSW who reported smoking at some time during pregnancy remains high compared with non-Aboriginal mothers. In 2012, the rate of smoking for NSW Aboriginal women during pregnancy was 49.9 per cent compared to 9.1 per cent for non-Aboriginal women (10).

### Current smoking in adults by sex, NSW 2002-2013



Source: Health Statistics New South Wales: <http://www.healthstats.nsw.gov.au>

## Smoking prevalence amongst disadvantaged groups

While the smoking prevalence has declined significantly in the general population over the past 40 years, there are still a number of disadvantaged groups with high smoking prevalence. The *NSW Tobacco Strategy 2012-2017* has a focus on strategies that target disadvantaged groups in our society where smoking prevalence is high in an effort to reduce the associated disproportionate levels of tobacco related death and disease. (6) (11)

Smoking rates are high among Aboriginal people, those who are imprisoned, people from low socioeconomic groups, those with a mental illness or drug and alcohol dependency and those from some culturally and linguistically diverse groups. Low socioeconomic status groups are also more likely to have a higher level of nicotine dependence. Overall, they may be less confident about their ability to quit and may face increased barriers to quitting. (12)

## Health effects of tobacco smoke

Tobacco smoking is a leading cause of preventable ill health and death in Australia. Smoking is a major risk factor for coronary heart disease, stroke, peripheral vascular disease, many cancers and a variety of other diseases and conditions. (10)

One in every two smokers will die prematurely as a result of being a smoker. Smokers have a risk 20 times higher than non-smokers of getting lung cancer and 10 times higher risk of ischaemic heart disease. Pregnant women who smoke have an increased risk of miscarriage, premature birth and of having low birth weight babies. Infants who are born to mothers who smoke are more likely to have perinatal health problems including respiratory infections and Sudden Infant Death Syndrome. (13)

Smokers also have higher rates of poor wound healing and wound infections following a number of surgical procedures compared to non-smokers.

| Health effects of smoking                        |                                                                                 |
|--------------------------------------------------|---------------------------------------------------------------------------------|
| <b>Eyes</b><br>Macular degeneration              | <b>Stomach</b><br>Cancer, ulcer                                                 |
| <b>Hair</b><br>Hair loss                         | <b>Pancreas</b><br>Cancer                                                       |
| <b>Skin</b><br>Ageing, wrinkles, wound infection | <b>Bladder</b><br>Cancer                                                        |
| <b>Brain</b><br>Stroke                           | <b>Women</b><br>Cervical cancer, early menopause, irregular and painful periods |
| <b>Mouth and pharynx</b><br>Cancer, gum disease  | <b>Men</b><br>Impotence                                                         |
| <b>Lungs</b><br>Cancer, emphysema, pneumonia     | <b>Arteries</b><br>Peripheral vascular diseases                                 |
| <b>Heart</b><br>Coronary artery disease          | <b>Bones</b><br>Osteoporosis                                                    |

Source: Zwar, N et al. Supporting smoking cessation: a guide for health professionals, Royal Australian College of General Practitioners 2012

Smoking kills between half and two thirds of long-term smokers and half of these deaths occur in middle age. (13) The harm done by tobacco is due to the vast array of contaminants present in tobacco smoke. More than 7,000 harmful chemicals, over 70 known carcinogens, mutagens

and toxins are present in tobacco smoke, which can reach the brain, heart and other organs within 10 seconds of inhaling the smoke. (13) Some of the chemicals present in tobacco smoke and their adverse effects are listed in the table below.

| Chemical                                         | Health effect                                                                 |
|--------------------------------------------------|-------------------------------------------------------------------------------|
| Carbon monoxide                                  | Robs the body of oxygen and makes the blood sticky                            |
| Tar                                              | Clogs airways and causes or stimulates cancer                                 |
| Phenols                                          | Paralyses and kills cilia (the hair-like cells lining airways)                |
| Fine particles                                   | Irritates the throat and lungs, causes smoker's cough and damages lung tissue |
| Cadmium, lead, formaldehyde and hydrogen cyanide | Toxic to all organs of the body                                               |
| Polonium-210                                     | A radioactive substance that causes cancer                                    |

## Health effects of smoking during pregnancy

Smoking during pregnancy poses health risks to the mother and the baby. (14) Smoking at any stage of pregnancy is harmful but smoking in the second half of pregnancy poses the greatest risk to the health of both mother and baby. For the fetus, cigarette smoking during pregnancy has been linked to many serious and preventable medical conditions. Infants born to women who smoke during pregnancy are on average 200 g lighter and have a higher incidence of neonatal death and are at a greater risk of developing respiratory infections, asthma, allergy and otitis media. (11)

Smoking affects the healthy development and function of the umbilical cord and placenta and causes abnormalities or insufficiencies that can lead to serious complications for the pregnancy and the safe delivery of the baby. (11)

### The good news about quitting in pregnancy

Women who quit before or in the early months of pregnancy have the same risk of having a low birth weight baby as women who have never smoked.(11)

Smoking can cause premature rupture of the membranes (breaking of the amniotic sac before the onset of labour), placenta previa (when the placenta is attached to the uterine wall close to or over the cervix) and placental abruption (premature separation of the placenta from the wall of the uterus). (11)

## Health effects of second and third-hand smoke

### Second-hand smoke

Second-hand smoke (also called environmental tobacco smoke, involuntary smoke and passive smoke) is the combination of smoke emitted from the burning end of a cigarette or other tobacco product (sidestream smoke) and smoke exhaled by a smoker (mainstream smoke).

The U.S. Surgeon General's report 2006 states that in adults, breathing second-hand tobacco smoke can increase the risk of cardiovascular disease, lung cancer and other lung diseases. Second-hand smoke can also exacerbate the effects of other illnesses such as asthma and bronchitis. Exposing ex-smokers to other people's tobacco smoke increases the chance of relapsing to smoking. (15)

For children, inhaling second-hand tobacco smoke is even more dangerous. This is because children's airways are smaller and their immune systems are less developed, making them more likely to suffer negative health consequences such as bronchitis, pneumonia and asthma. Smoke-free areas provide a supportive environment for those who have quit and make smoking less visible and harmful for children and young people. (9)

### Second-hand smoke - key points

- Second-hand smoke exposure causes disease and premature death in children and adults who do not smoke.
- Children exposed to second-hand smoke are at an increased risk for Sudden Infant Death Syndrome (SIDS), acute respiratory infections, ear problems and more severe asthma.
- Childhood exposure to parental smoking causes respiratory symptoms and slow lung growth in children.
- Exposure of adults to second-hand smoke has immediate adverse effects on the cardiovascular system and can cause coronary heart disease and lung cancer.
- Scientific evidence indicates that there is no risk-free level of exposure to second-hand smoke.
- Eliminating smoking in indoor spaces fully protects non-smokers from exposure to second-hand smoke. Separating smokers from non-smokers, cleaning the air and ventilating buildings cannot eliminate the exposure of non-smokers to second-hand smoke.

Source: U.S. Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General. 2006.* (15)

### Third-hand smoke

Third-hand smoke refers to the residual nicotine and other chemicals left on the surface of objects after the second-hand smoke has cleared. It has been shown to react with common indoor pollutants to create a toxic mix that contains cancer-causing substances, posing a potential health hazard to those who are exposed to it. Third-hand smoke is thought to potentially cause the greatest harm to infants and young children, because younger children are more likely to crawl on the floor and eat from their hands without washing them first, ingesting the toxins into their system. (9)

Third-hand smoke residue builds up on surfaces over time, resists normal cleaning and cannot be eliminated by airing out rooms, opening windows,



using fans or air conditioners, or confining smoking to only certain areas of a home. Studies show that third-hand smoke clings to hair, skin, clothes, furniture, drapes, walls, bedding, carpets, dust, vehicles and other surfaces, long after smoking has stopped. (16)

Third-hand smoke is a relatively newly discovered concept and area of investigation. *Tobacco in Australia* states that 'further research is needed to establish the content of third-hand smoke, how long it persists, how much it contributes to exposure to tobacco pollution overall, and what impact it has on human health'. (9) In the meantime, the best way to protect people from third-hand smoke is to continue to promote smoke-free environments, including private homes, vehicles and public places.

## Benefits of quitting

Quitting smoking has immediate and long-term health benefits for people of all ages. Smoking causes acute and chronic changes to the body and over time these changes progress towards disease. Quitting smoking results in the reversal of these changes, the slowing of disease progression and provides the potential for damage reversal. Most people who smoke are aware that smoking damages health but they may not know that the health benefits of quitting smoking start within minutes of smoking the last cigarette and continue to accumulate for many years.

### Benefits of quitting

#### ■ 20 mins

- Heart rate reduces

#### ■ 12 hours

- Almost all the nicotine is metabolised
- Levels of carbon monoxide in expired air have dropped dramatically

#### ■ 5 days

- Taste and smell improve

#### ■ 2 weeks - 3 months

- Heart attack risk begins to reduce
- Breathing improves
- Risk of wound infection after surgery is substantially reduced

#### ■ 1-9 months

- Cilia (hair-like cells lining airways) begin to recover and lung function improves
- Coughing and shortness of breath decrease

#### ■ 1 year

- Risk of coronary heart disease is halved compared to continuing smokers

#### ■ 5 years

- Stroke risk is reduced to that of a non-smoker 5-15 years after quitting and the risk of cancers of the mouth, throat, and oesophagus decreases

#### ■ 10 years

- Risk of lung cancer is about half that of a continuing smoker and continues to decline
- The 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

#### ■ Other benefits of quitting

- Quitting improves fitness and skin appearance
- Money previously spent on cigarettes is saved
- Wound healing is improved in clients who quit smoking at least 4-6 weeks before surgery

Adapted from: Zwar, N et al. *Smoking Cessation Guidelines for Australian General Practice: Practice Handbook*. Canberra: Department of Health and Ageing, 2004. (17)

## SECTION TWO

# The 5As approach to supporting clients to manage nicotine dependence, make a quit attempt or stay quit

### Taking an evidence-based approach

Some people are successful at stopping smoking unaided. For these people, education campaigns and tobacco control policies that motivate and reinforce quit attempts and limit where smoking is permitted may have contributed to their motivation to quit. For many others, assistance is required to encourage and support quit attempts, manage symptoms of nicotine withdrawal and prevent relapse. Advice from health professionals and others working in a range of settings can help smokers to quit. The World Health Organization states that the decision to offer smokers advice and assistance with quitting should be based on factors such as access to smokers rather than professional discipline. (18)

There is strong evidence that managing nicotine dependence and providing smoking cessation advice and support to clients who smoke is an effective smoking cessation strategy, relevant to all NSW Health settings. (19) While spending more time (longer than 10 minutes) advising smokers to quit yields higher abstinence rates, offering brief advice for as little as three to five minutes has been shown to have clear benefits. The major benefit is motivating someone to make a quit attempt. Additional follow-up leads to further increases in smoking cessation rates when compared to no follow-up. (19)

### Brief interventions for smoking cessation: The 5As approach

Routine smoking cessation brief intervention is best practice for health professionals and community service workers. Time is a limited commodity for most workers and a smoking cessation brief intervention is an efficient quit smoking approach. Making the most of every opportunity to raise awareness, share information and motivate a client to think about their smoking behaviour is worth the time and effort.

This guide is based on the 5As brief intervention model which is designed to be used with all smokers regardless of intention to quit smoking. The Department of Health and Human Services

U.S. Surgeon General's report: *Treating Tobacco Use and Dependence: 2008 Update* confirmed the benefits of the 5As approach and its value as a tool for guiding smoking cessation interventions provided by individuals working in a range of professions. (20)

### What is brief intervention?

Brief intervention includes routinely identifying smokers, providing advice and encouragement to quit, supporting behaviour change, prescribing or recommending pharmacotherapy and referring to support services such as the Quitline and the iCanQuit website and local tobacco treatment specialists.

All health professionals and community service organisation workers can use the 5As approach. The 5As are:

1. **ASK** about smoking at every opportunity
2. **ASSESS** smokers' willingness to quit and their dependence on nicotine
3. **ADVISE** all smokers to quit
4. **ASSIST** smokers with information, referrals and treatments
5. **ARRANGE** follow-up contact to support quit efforts

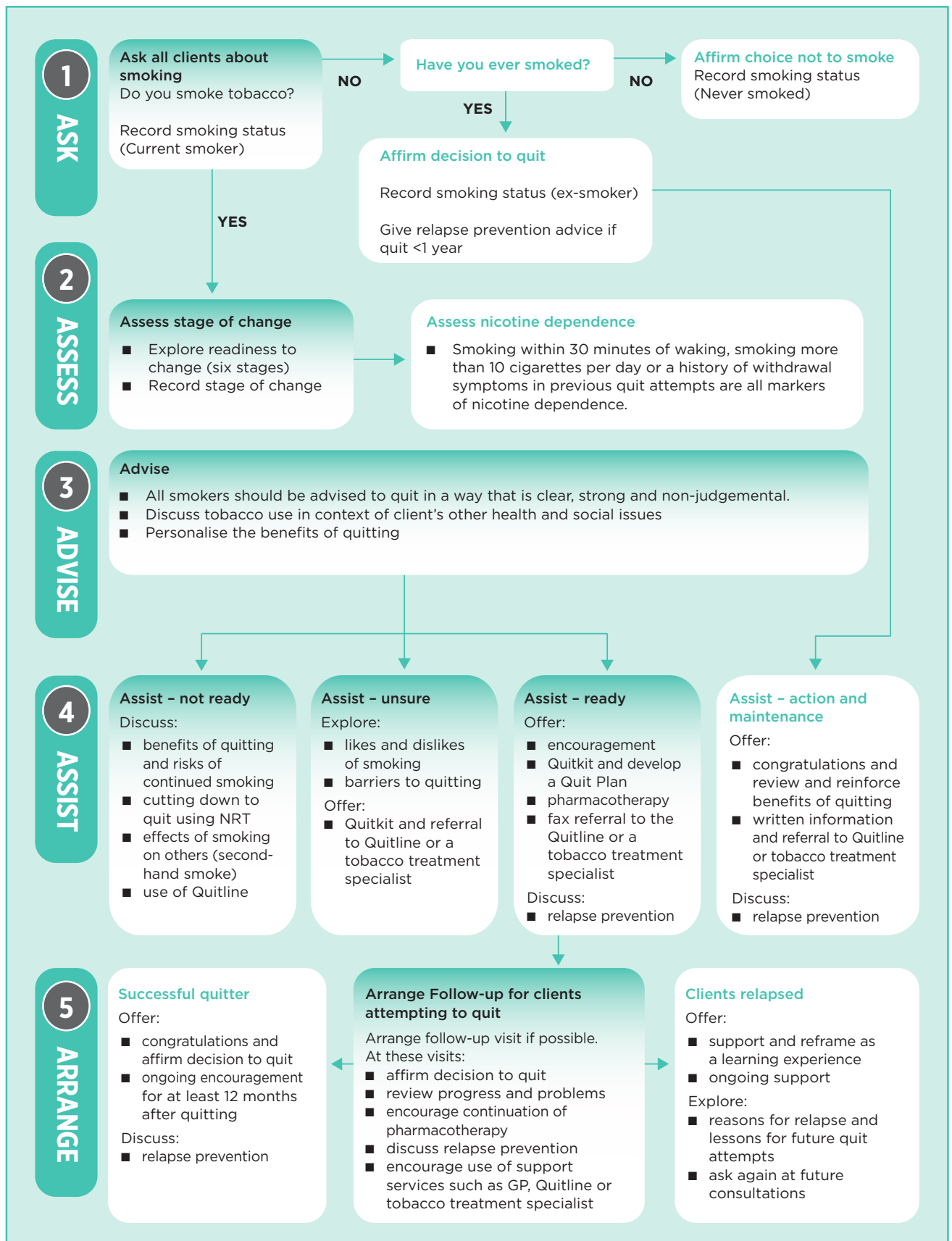
The exception to the use of the 5As approach is the preferred use of the 3As approach (Ask, Approach, and Advise) by public oral health staff (21). A NSW Health policy directive released in 2009, *Smoking cessation brief intervention at the chairside: role of public oral health/dental services* sets out the minimum requirements for public oral health staff to ask about and record smoking status, and to provide and record cessation advice and referral as appropriate. The policy can be downloaded from: [www.health.nsw.gov.au/policies/pd/2009/PD2009\\_046.html](http://www.health.nsw.gov.au/policies/pd/2009/PD2009_046.html)

The following 5As flowchart is adapted from the Royal Australian College of General Practitioners publication: *Supporting smoking cessation: a guide for health professionals – updated July 2014*. (22)

# Smoking cessation brief intervention 5As

## Step 1: Ask

### Smoking cessation brief intervention 5As



All clients should be asked whether they smoke tobacco. You may want to prompt the client by asking about use of specific tobacco products such as cigarettes, cigars, chop-chop, water pipes, or cannabis mixed with tobacco. The client's smoking status should be recorded in their medical record or other client recording system. Implementing recording systems that document tobacco use almost doubles the rate at which clinicians intervene with smokers and results in higher rates of smoking cessation. (19)

**Key questions to ASK all clients and actions to follow**

- "Do you smoke tobacco?"
- "Have you ever smoked tobacco?"
- "Do you smoke tobacco products such as cigars, chop-chop, water pipe, or cannabis mixed with tobacco?"

**For a current smoker:**

- Move on to 'Assess' to determine stage of change and nicotine dependence

**For an ex-smoker:**

- Congratulate the client, reaffirm their decision to quit and promote the benefits of staying a non-smoker.
- If the client has been an ex-smoker for less than one year, discuss relapse prevention and coping strategies. Refer to Relapse Prevention on page 13 for more information.

**For a person who has never smoked:**

- Congratulate the client on their decision not to smoke.

**Step 2: Assess**

The Assess stage involves two processes: Assessing the stage of change and assessing nicotine dependence.

**Assessing stage of change**

For many smokers, quitting smoking is a journey or process that occurs over time and the 'stages of change' model is a useful guide to providing appropriate actions and support to match the person's stage of readiness.

For others, a quit attempt is a spontaneous decision triggered by an event or interaction that results in a sudden switch in a person's motivation to quit smoking. This can even occur for those clients who initially appeared not to be interested in quitting and may take place in a hospital, health or community service setting or in response to information that has been provided about new ways to achieve successful smoking cessation. For this reason, the 'stages of change' model is a tool that needs to be used carefully as it will not be applicable to all clients.

The model consists of six stages of readiness to change as outlined below.

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. For a busy clinician with limited time, this understanding may provide insight into the type of brief advice most likely to be useful to a person at this time.

**Stages of readiness to change**

|                                      |                                                                                                                                    |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pre-contemplation (not ready)</b> | This is when a smoker does not recognise their smoking as a problem, is unconcerned about their smoking or is not ready to change. |
| <b>Contemplation (unsure)</b>        | This is when a smoker is ambivalent or unsure about their smoking and is thinking about changing their behaviour.                  |
| <b>Determination (ready)</b>         | This is when a smoker is ready to change their behaviour and plans to do so within the next 30 days.                               |
| <b>Action</b>                        | This is when a smoker is actively quitting, having quit within the last six months.                                                |
| <b>Maintenance</b>                   | This is when a smoker has quit over six months ago and the non-smoking behaviour has been established.                             |
| <b>Relapse</b>                       | This is when an ex-smoker has gone back to smoking.                                                                                |

### Key questions to ask

- How do you feel about your smoking at the moment?
- Have you ever thought of giving up smoking?
- Have you had previous quit attempts and if so what happened?
- How can I help to increase your confidence in quitting?
- What would it take for you to quit?
- Have you considered cutting down while using NRT, with a view to quitting?

When asking questions, it is important to express concern and interest, and not criticism or judgement.

Clarify responses by asking a client whether they are willing to make a quit attempt at this time or in the near future.

Source: Richmond et al 1991 (23)

### Assessing nicotine dependence

Tobacco use produces dependence on nicotine, which causes withdrawal symptoms and difficulty in controlling future use in those who attempt to quit. (24) Assessment of nicotine dependence is important to identify whether the smoker is likely to experience nicotine withdrawal when they quit smoking and to plan management strategies.

### Nicotine dependence can be assessed quickly by asking three questions:

- How soon after waking do you have your first cigarette?
- How many cigarettes do you smoke each day?
- If you have previously attempted to quit, did you experience withdrawals or cravings?

Smoking a cigarette within 30 minutes of waking, smoking more than 10 cigarettes per day or a history of withdrawal symptoms in previous quit attempts are all indicators of nicotine dependence.

Smokers who experienced withdrawal symptoms during previous quit attempts can be expected to experience them again in a future quit attempt.

In some situations it may be better to ask 'How soon after waking do you *crave* your first cigarette' as some people may crave a cigarette when they first wake up but not be able to access one until later in the day for a variety of reasons (limited money to spend on cigarettes and the need to ration them over the day, too busy first thing in the morning). The craving for a cigarette within 30 minutes of waking would still indicate nicotine dependence.

### Time to first cigarette (TTFC)

When time and resources are limited, nicotine dependence can be assessed by simply asking one question:

**'How soon after waking do you have your first cigarette?'**

Consider those with a TTFC within the first 30 minutes of waking to be nicotine dependent.

### Step 3: Advise

Brief, repetitive, consistent, positive reminders to quit or reinforcing recent quit efforts can increase quit attempts and greatly improve quit smoking success. Providing brief advice to quit can take as little as three minutes. When the practice is routinely applied to a large proportion of clients who smoke a significant impact on population smoking rates can be achieved. (19)

It is important to remember that advice to quit is useful regardless of the client's motivations and quit intentions and that messages about quitting should be clear, strong, personalised, supportive and non-judgmental.

### Tips

#### Discuss tobacco use in the context of the client's other health or social issues

- Linking the risks associated with the presenting condition can assist the smoker by making the cessation message more personally salient. For example, "*The best thing you can do for your health is quit smoking.*"
- Discussing the impact of smoking on finances can motivate people from disadvantaged community groups to quit. For example, "*If you quit smoking you will have more money for those things you have had to go without.*"

#### Personalise the benefits of quitting smoking

- Examples include improvement of other illnesses, importance of smoking as a risk factor for future illness, not exposing others (including children) to passive smoking and saving money. For clients with children, state: "*If you quit, your children are less likely to start smoking.*"

## Step 4: Assist

The assistance offered should be guided by the smoker's 'stages of change' assessment and their level of nicotine dependence. However, be mindful that a client's decision to quit could be unplanned or the result of an event or trigger, in which case they may have moved straight to the 'ready' and 'action' stages rather than progressing through any of the earlier stages. The following sections provide actions for each Assist 'stages of change' category.

### **Assist – not ready (pre-contemplation stage)**

A client who is not ready to quit can be given the following support:

- Discuss the risks to current and future health of continuing smoking.
- Discuss the benefits of quitting related to health, finances and family using information materials.
- Provide information about reducing the impact of smoking on others, especially children, and encourage making the home and car smoke-free zones.
- Discuss the option of using nicotine replacement therapy (NRT) to cut down to quit.
- Advise that help is available from the Quitline when the client is ready.

### **Important actions**

- Note in the client records that risks of smoking and benefits of quitting have been discussed with the client.
- Discuss these again at their next visit (if applicable).

### **Assist – unsure (contemplation stage)**

It is helpful to explore clients' doubts and concerns in relation to smoking and quitting with those who are in the contemplation stage. Useful tools to use with clients who are unsure about quitting include motivational interviewing and referral to NSW Quitline 13 7848. These are discussed in detail in the next section.

### **Assist – ready or already quit (determination and action stages)**

Congratulate clients who have made the decision to quit and talk about the range of options and strategies for quitting. Evidence from randomised trials and systematic reviews have consistently shown that supporting smokers to quit is more effective than leaving them to go it alone 'cold turkey'. (19)

| Discussion points                  | Details                                                                                                                                                                                                                 |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Use of smokerlyzer                 | Discuss the client's results from their nicotine dependence test, if using a smokerlyzer.                                                                                                                               |
| Use of pharmacotherapy             | Discuss pharmacotherapy treatments with nicotine dependent clients and how to use them correctly.                                                                                                                       |
| Past experiences                   | Discuss past quitting experiences including methods used and any issues that arose.                                                                                                                                     |
| Discuss triggers                   | Discuss why and where smoking occurs and what triggers the client to want to smoke. For example, drinking alcohol, socialising, times of stress.                                                                        |
| Develop coping strategies          | Develop coping strategies for 'trigger' situations. For example, avoiding coffee and alcohol, replacing smoking with exercise and making the home smoke-free.                                                           |
| Consider setting a quit date       | If setting a quit date, ensure it is realistic and not at a time when there will be stressful or social events that will make it difficult. If client does not want to set a quit date, talk about cutting down safely. |
| Enlist support                     | Encourage the client to tell friends and family about their intentions to quit and discuss how they can help the client to stay quit.                                                                                   |
| Get ready to quit                  | Advise the client to discard cigarettes, lighters and ashtrays the day before the quit day from their home, car and workplace. If the client is not ready to quit, talk about cutting down safely.                      |
| Reduce stimulant intake            | Advise the client to reduce caffeine intake by half and avoid alcohol for the first two weeks.                                                                                                                          |
| Set goals and rewards              | Engage the client in setting incremental goals and rewards for not smoking.                                                                                                                                             |
| Consider adjustment to medications | Discuss any implications for current medication use and refer to a doctor for advice about adjusting medications during a quit attempt.                                                                                 |
| Referral to Quitline               | Contact the Quitline on 13 7848 (13 QUIT) to arrange for professional advice and for a free call-back service or visit iCanQuit website <a href="http://www.iCanQuit.com.au">www.iCanQuit.com.au</a>                    |

## Assist – already quit and maintenance

### Assisting a client to stay quit

- Congratulate the client.
- Reinforce the benefits of quitting and of being a non-smoker.
- Assist with relapse prevention by offering support and helping the client to identify high-risk situations such as drinking alcohol, emotional stress and social situations with smokers.
- Suggest the client keeps some short acting oral NRT with them just in case they experience cravings for a cigarette.
- Encourage the client to seek advice on coping strategies to avoid relapse including from Quitline 13 7848 or [www.iCanQuit.com.au](http://www.iCanQuit.com.au)

## Step 5: Arrange

### Arrange follow up

Follow-up visits to discuss quit smoking progress and to provide reassurance and support have been shown to increase the likelihood of successful long-term abstinence. All interventions provided to a client should be recorded in the client's record so that progress can be monitored and appropriate follow-up advice and support provided at subsequent visits to health professionals.

## Managing and preventing relapse

Talking to clients about relapse and relapse prevention is an important part of the brief intervention process. For many smokers, quitting smoking is a dynamic and continuing process often involving repeated quit attempts, rather than a discrete event. It is very common for people to have a slip or lapse (occasional smoking of no more than one or two cigarettes) in the course of a quit attempt.

A *relapse* is a return to regular smoking. Most lapses and relapses occur in the days or weeks just after stopping. Common triggers for relapse are:

- not coping with cravings
- under-use or misunderstanding how to use pharmacotherapy appropriately
- not recognising triggers
- social situations often involving alcohol
- negative emotional states such as anger, frustration and anxiety.

Predictors of relapse include withdrawal symptoms not being managed with pharmacotherapy, short periods of abstinence in previous quit attempts, low motivation to quit, low confidence in ability to quit, many smokers in the client's environment and high alcohol consumption. Cannabis use can also be associated with relapse given the common practice of mixing cannabis with tobacco. (25)

### Actions for follow-up contact

#### If relapsed

- Empathise and reframe as a learning experience
  - Explore reasons for relapse
  - Help build motivation to try to quit again
  - Discuss relapse prevention
- Review current medications

#### If client has not made their planned quit attempt

- Explore reasons for delay
- Explore ambivalence; help to build motivation to try quitting again
- Encourage the client to set another quit date

#### If successful quitter

- Congratulate, praise and affirm decision
  - Review progress and discuss any issues
  - Review for presence of withdrawal symptoms
  - Encourage completion of full course of pharmacotherapy
  - Discuss coping strategies and relapse prevention.
- Reinforce the need for regular monitoring of other medication use.

Source: Zwar, N et al. *Smoking Cessation Guidelines for Australian General Practice: Practice Handbook*. (17)

Avoiding alcohol during the first two weeks of a quit attempt may help to avoid a relapse. It is very important that smokers are advised to avoid any smoking at all after quitting, as research indicates that this often leads to relapse.

If a client does relapse, ask open-ended questions to help that person identify why the relapse occurred and work with the client to develop strategies to prevent another lapse or a full relapse to regular levels of smoking. Focus on identifying and resolving situations where relapse risk is highest and then develop and rehearse strategies to deal with them in advance.

Useful questions include:

“In what situations do you find it hard not to smoke?”

“How did you feel when you lapsed and had a cigarette?”

“Can you think of some ways to avoid this happening again?”

If full relapse has occurred, encourage the client to set another quit date and provide information about the Quitline 13 7848 and iCanQuit website. It is important to address any particular causes of the relapse (refer to the table on Barriers and Strategies to overcome these on page 21).



## SECTION THREE

# Nicotine replacement therapy (NRT) and other smoking cessation pharmacotherapies

The use of cessation pharmacotherapies are recommended for the management of nicotine withdrawal symptoms, where clinically appropriate. Three forms of pharmacotherapy are licensed and available in Australia to assist smoking cessation. These are nicotine replacement therapy (NRT), varenicline and bupropion. These medications have been proven to consistently increase abstinence rates. (19) Their use should be encouraged for all smokers except in the presence of contraindications.

Smokers using pharmacotherapy should be encouraged to use it for a sufficient period (minimum eight weeks with NRT, seven weeks with bupropion and 12 weeks with varenicline). They should also be given clear instructions on how to use the medication. In some instances, especially for heavily nicotine dependent smokers, combinations of medications may be required.

### Pharmacotherapy alone is not enough

Use of pharmacotherapy alone is not sufficient. Smokers need support to manage cues, habits and behaviours related to smoking if long term success is to be achieved.

Unlike cigarette smoke, NRT and other approved forms of pharmacotherapy **do not**:

- contain non-nicotine toxic substances such as carbon monoxide and tar
- produce dramatic surges in blood nicotine levels
- produce strong dependence.

## Nicotine replacement therapy (NRT)

### Products available in Australia

NRT products deliver nicotine with the intent to replace, at least partially, the nicotine obtained from cigarettes and to reduce the severity of nicotine withdrawal symptoms. The best results are achieved when combined with behavioural advice and follow-up. (19) Seven forms of NRT are available in Australia.

| Forms of NRT  | Dosages                                                                                                                   |
|---------------|---------------------------------------------------------------------------------------------------------------------------|
| Gum           | 2 mg and 4 mg                                                                                                             |
| Lozenge       | 2 mg and 4 mg                                                                                                             |
| Mini lozenges | 1.5 mg and 4 mg                                                                                                           |
| Inhalators    | 15 mg cartridge                                                                                                           |
| Oral sprays   | 1 mg/spray                                                                                                                |
| Oral strips   | 2.5 mg strip                                                                                                              |
| Patches       | 24-hour patches include dosages of 21 mg, 14 mg and 7 mg. 16-hour patches include dosages of 25 mg, 15 mg, 10 mg and 5 mg |

### Contraindications and precautions for using NRT

#### Contraindications

There are few contraindications associated with NRT use. These include:

- Children under 12 years of age
- People with known hypersensitivity to nicotine or any other component of the NRT product (eg those with phenylketonuria to avoid lozenges)

Note: People weighing less than 45 kg can use NRT but may require the lower dose such as a 14 mg/24hr patch.

#### Precautions

NRT should be used with caution for clients in hospital for acute cardiovascular events, but if the alternative is smoking, NRT can be used under medical supervision. (22)

### Possible side effects of NRT products

No serious side effects of either short or long-term NRT use have been reported over the 30 years it has been in use. Side effects are relatively minor for most users and NRT products are generally rated as safe compared to other medications. (9) However, individuals may experience some minor side effects when using NRT formulations. The most common side effects and suggested ways to assist a client to deal with these effects are listed in the table overleaf.

| Form of NRT       | Possible side effect                                                                                                                                                                                                                     | Ways to deal with the side effect                                                                                                                                                                                                                                                                                                                   |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nicotine patches  | <ul style="list-style-type: none"> <li>■ Skin rashes where the patch is applied.</li> <li>■ Sleep disturbance (can be due to caffeine toxicity, timing of the patch or nicotine withdrawal).</li> <li>■ Neuralgia (uncommon).</li> </ul> | <ul style="list-style-type: none"> <li>■ Rotate the patch site and use hydrocortisone 1% cream for skin irritation.</li> <li>■ Apply the patch in the morning rather than at night. Remove patch before sleep. Decrease caffeine intake especially in evening.</li> <li>■ Change the patch location or reduce the strength of the patch.</li> </ul> |
| Oral NRT products | <ul style="list-style-type: none"> <li>■ Irritation of the mouth or throat, headaches, hiccups, indigestion, nausea, and coughing.</li> </ul>                                                                                            | <ul style="list-style-type: none"> <li>■ Check for correct use of oral products or change to a different oral product.</li> </ul>                                                                                                                                                                                                                   |

## How to use NRT products

It is very important that clients are given practical instructions on how to use NRT products correctly if they are to be successful. It should be noted that for oral NRT products the nicotine is absorbed through the lining of the mouth.

- **Patches:** Patches deliver nicotine more slowly than other products. Nicotine from patches is slowly absorbed through the skin, taking 3 – 6 hours to reach maximum absorption, depending on the strength of the product. The 16 hour patch should be applied on waking and removed at bedtime. The 24 hour patch should be applied at night, just prior to sleep, to ensure adequate dose on waking in the morning (except for pregnant women who should remove the patch before sleeping and only wear through the day). Those who experience sleep disturbances may also remove the 24 hour patch before sleeping. Apply to clean, non-fatty and hairless skin on the body and rotate around different parts of the body each time a new patch is used.
- **Gum:** The gum should be chewed until it gives a peppery/tingling feeling, then flattened and put back ('parked') between the gum and the cheek. The gum should be chewed and 'parked' several times per piece. It is recommended to avoid eating and drinking while using the gum and 15 minutes before and after using gum wherever possible.
- **Inhalators:** Inhalators are designed to combine pharmacological and behavioural substitution (hand to mouth ritual). Puff lightly, do not inhale deeply as this can cause coughing and irritate the throat. The vapour is drawn through the cartridge for 20-30 minutes then the cartridge should be discarded.
- **Lozenges and mini-lozenges:** Lozenges may be more effective than gum in reducing nicotine withdrawal symptoms. Lozenges work in the same way as gum except they are sucked. The

lozenge should be sucked 3-4 times to release the nicotine then parked on the inside lining of the cheek. Continue to give the lozenge 3-4 sucks every five minutes for up to 30 minutes at which time it should be completely dissolved. Eating and drinking should be avoided while using the lozenge. Lozenges should be used regularly to avoid under-dosing unless medically recommended. Lozenges should not be chewed or swallowed.

- **Mouth sprays:** The spray should be directed onto the inside of the cheek or under the tongue. It should not be sprayed on the lips, directly into the throat or inhaled as inhaling may cause hiccups or a burning sensation in the back of the throat. Eating and drinking should be avoided when using the mouth spray as this will reduce its effectiveness.
- **Oral strips:** Oral strips are very fast acting and start relieving cravings within 50 seconds, with maximum effect at 10 minutes. The strip should be placed on the tongue and pressed to the roof of the mouth where it will dissolve in 2-3 minutes. Eating and drinking should be avoided while the film is in the mouth.

### NRT under-dosing is common and can be prevented

Some of the reported side effects of NRT are due to nicotine withdrawal rather than the NRT product itself and require more NRT rather than less. It is common practice to under-dose on NRT, resulting in ongoing withdrawal symptoms. Over-dosing on NRT is rare and it is always safer to use multi-patching and/or extra oral NRT products to manage withdrawal symptoms than resort to smoking.

## Monotherapy NRT

Monotherapy refers to the use of one form of NRT only. For less nicotine dependent clients, the use of a patch or a single form of oral NRT may be sufficient to manage the urge to smoke and control withdrawal symptoms. For guidance on the dose of each form of NRT to provide to clients with different levels of nicotine dependence, refer to the 'NRT Dosage Chart' at Appendix 1.

## Combination NRT

Combining nicotine patches with oral forms of NRT is generally more effective than a single form of NRT. (19) The Royal Australian College of General Practitioners recommends that combination NRT be offered if the client is unable to remain abstinent or continues to experience urges to smoke and withdrawal symptoms using one type of NRT. (22) Combination therapy works by increasing the nicotine substitution level and providing better relief from cravings by delivering a constant level of nicotine from the patch, boosted by the intermittent use of faster acting oral NRT to cope with cravings. (26)

Multi-patching may be required for clients who are still experiencing symptoms of nicotine withdrawal using one patch, in addition to the use of an oral form of NRT. The second patch should be applied

in the morning. CO monitoring is advised if considering recommending more than two patches. Refer to Appendix 2 for Associate Professor Renee Bittoun's Combination NRT Algorithm.

## The 'cut down to stop' method using oral NRT

Whilst abstinence is the gold standard for smoking cessation, there are some people who are still ambivalent about quitting and may require help to move towards abstinence in stages. Some smokers choose to cut down the number of cigarettes they smoke in the first instance rather than quitting outright.

Unfortunately smokers who cut down the number of cigarettes smoked often smoke these cigarettes in a different way (breathing in deeper and holding the smoke in their lungs longer) and may therefore inhale a similar dose of nicotine and other damaging toxins as they did from smoking their usual amount – this is called 'titrating the nicotine dose'.

To mitigate this effect, clients who choose the 'cut down to stop' method should use NRT at the same time. A 2010 Cochrane Review found that this method can be successful in leading to smoking cessation. (27)

### Cut down to stop method

The 'cut down to stop' method is suitable for:

- Smokers who are not interested in quitting now, but are interested in quitting smoking at some point in the near future, or
- Those who smoke high volumes of cigarettes and require longer time to cut down to quit completely.

#### Step 1

Cut cigarette consumption by an agreed amount. Establish number of cigarettes smoked and aim to reduce them by an agreed percentage, using oral NRT to manage urges to smoke.

#### Step 2

Continue cutting down the number of cigarettes smoked until ready to stop smoking completely using oral NRT to manage urges to smoke.

#### Step 3

When ready to stop smoking completely, cut out all cigarettes and continue to use oral NRT for up to a further three months.

#### Step 4

Gradually cut down the amount of oral NRT until able to stop completely.

## Using nicotine patches prior to quitting

Another approach to quitting is the use of a high dose NRT patch prior to quitting. Using a 21 mg or 25 mg patch for two weeks before quitting has been shown to increase success rates over and above the traditional quit day application by 35 per cent. (26) The smoker's self-efficacy is increased as they feel confident that the NRT can minimise their withdrawal symptoms when they do decide to quit. After a person has stopped smoking, they should continue to use patches in the usual manner and add oral NRT products if needed. (22)

### Tip

Clients need to be reassured that it is safe to smoke while using NRT products.

## Pharmaceutical Benefits Scheme (PBS) listing of NRT patches

The PBS listing for nicotine patches (25 mg/16 hours and 21 mg/24 hour patch) is available as an aid to quitting smoking for people who participate in a support and counselling program. For full details of the availability of nicotine patches and other forms of pharmacotherapy on the PBS refer to Appendix 3 or visit the PBS website at [www.pbs.gov.au](http://www.pbs.gov.au)

## Other pharmacotherapy products that can assist quitting

There are two non-nicotine medications available in Australia to assist people with smoking cessation. These are varenicline and bupropion. These medications need to be prescribed and monitored by a medical practitioner. Nortriptyline has also been shown to be effective for smoking cessation but is not currently registered for smoking cessation in Australia.

## Varenicline

### Effectiveness

- Varenicline was developed specifically to help people stop smoking. From available evidence it is the most effective monotherapy currently available. (22) A Cochrane meta-analysis found it more than doubled sustained abstinence rates at six months follow-up compared to placebo and that varenicline monotherapy is more effective than NRT monotherapy but of similar efficacy to combination NRT. (28)
- Varenicline reduces the severity of tobacco withdrawal symptoms while simultaneously reducing the pleasurable sensation of nicotine.

### Contraindications and adverse effects

- Not recommended for pregnant and lactating women and adolescents.
- About 30% of users experience nausea; usually mild and settles with time. Tablets should be taken with food to reduce the risk of nausea.
- There have been reports of neuropsychiatric adverse effects in clients attempting to quit smoking using varenicline, including depressed mood, aggression/agitation, changes in behaviour and suicidal ideation. The evidence from a recent meta-analysis found that, compared with placebo, there is no increase in any of these neuropsychiatric adverse effects in clients taking varenicline. (29) Although a causal relationship of these symptoms with varenicline has not been demonstrated, clients using varenicline who experience any of the above symptoms should be advised to stop using the product immediately. (22)

### Dosage and duration

- A course of varenicline requires two to three authority scripts. For varenicline dosage guidelines, refer to the RACGP *Supporting smoking cessation guide for health professionals 2011- updated July 2014*. (22)

### Availability on the PBS

- Varenicline is available in Australia on the PBS as an aid to quitting smoking for people who participate in a support and counselling program. It can be prescribed for 12 weeks or 24 weeks. For full details of the availability of varenicline and other forms of pharmacotherapy on the PBS refer to Appendix 3 or visit the PBS website at [www.pbs.gov.au](http://www.pbs.gov.au)

## Bupropion

### Effectiveness

- Bupropion was originally developed as an antidepressant medication. It has been found to significantly increase the long-term cessation rate compared to placebo. (30)
- Its action in helping people to quit is independent of its antidepressant effects and is therefore suitable for people without a history of depression.
- Bupropion is safe and effective when used by those with stable depression, cardiovascular and respiratory disease.
- Bupropion improves short-term (but not long-term) smoking abstinence rates for people with schizophrenia and it has a good safety profile in this group.
- Bupropion is not as effective as varenicline, however it is a good option in cases where varenicline is not appropriate. There is insufficient evidence that adding bupropion to NRT provides any long term benefit. (30)

### Contraindications

Bupropion is contraindicated in clients:

- with a history of seizures
- with a current or prior diagnosis of bulimia or anorexia nervosa
- currently using a monoamine oxidase inhibitor (MAOI) – at least 14 days should elapse between discontinuation of MAOIs and initiation of treatment with bupropion
- undergoing abrupt withdrawal from alcohol or benzodiazepines
- pregnant or lactating women and adolescents

### Precautions

- Bupropion should be used with caution in those taking medication that can lower seizure threshold such as antidepressants and oral hypoglycaemic agents.
- Alcohol consumption should be minimised or avoided completely if a client is taking bupropion because alcohol can alter the threshold at which bupropion induces seizures. A sudden decrease in alcohol consumption can also alter the seizure threshold.

### Dosage and availability on the PBS

- 50 mg once per day for three days and then increased to 150 mg twice per day
- The client should stop smoking in the second week of treatment
- Bupropion is available in Australia as a PBS authority item once per year.

*Information on varenicline and bupropion adapted from Zwar, N et al. Supporting smoking cessation: a guide for health professionals. Melbourne: Royal Australian College of General Practitioners, 2011- updated July 2014 (22)*

## Pharmacotherapy issues for specific client groups

### NRT during pregnancy and lactation

A 2004 Cochrane review (31) emphasised the importance of attending to a pregnant woman's smoking behaviour as a part of antenatal care. If smoking cessation occurs in the first 16 weeks of pregnancy, most or all of the adverse effects of cigarette smoking are avoided. (32) Pregnant women should be encouraged and supported in the first instance to quit without the use of pharmacotherapy and should be informed that nicotine withdrawal symptoms may occur but it will not harm their unborn baby. Both varenicline and bupropion are unsuitable for women during pregnancy and while breastfeeding.

The use of NRT in pregnancy has been controversial because of concerns about effectiveness and safety. A 2012 Cochrane review of randomised controlled trials did not detect an effect of NRT for smoking cessation in pregnancy. (33) It is likely that this lack of effect is due to inadequate dosing of NRT due to increased metabolism of nicotine in pregnancy and the low adherence to therapy in some studies.

In England, many pregnant smokers use single form and combination NRT (patch plus an oral NRT). A correlational study of 3,880 pregnant smokers that examined whether the latter was associated with higher quit rates found that combination NRT was associated with higher odds of quitting compared with no medication, whereas single NRT showed no benefit. (34) The authors conclude that while this study was based on correlational data, it lends support to continuing this treatment option pending confirmation by a Randomised Controlled Trial.

The growing consensus among experts is that NRT is much safer than continued smoking during pregnancy as it does not contain any of the harmful chemicals in cigarette smoke and offers an important opportunity to increase the likelihood of smoking cessation. (34) (35) In addition, NRT has been shown to reduce smoking in pregnant women sufficiently to increase birth weight. (36) Guidelines from the Royal Australian College of General Practitioners and the Therapeutic Guidelines now suggest that NRT be considered as a smoking cessation support in pregnancy. (22) (37)

In the event that quitting with behavioural support alone is unsuccessful and the woman requires additional support managing nicotine withdrawal symptoms, NRT should be considered following an assessment of the risks and benefits with a health professional. Any smoking cessation interventions for pregnant women should be integrated into medical records of pregnancy as part of routine practice and be monitored regularly.

Intermittent-use NRT formulations (gum, lozenges, mini lozenges, inhalators, oral strips and mouth sprays) are the preferred first line of NRT treatment during pregnancy because they provide smaller daily doses of nicotine than continuous-use formulations (nicotine patches). (22) Due to the increased metabolism of nicotine during pregnancy, higher doses of NRT such as the 4 mg gum, lozenge or mini lozenge should be recommended. The nicotine patch may be used in the event that pregnancy nausea occurs, or the use of oral NRT is problematic or if combination therapy is required. The 25 mg/16 hour patch is appropriate to use. Alternatively the 21 mg/ 24 hour patch can be used but should be removed for eight hours overnight with a new patch applied in the morning.

Breastfeeding mothers can use NRT (oral forms and patch) once the risks and benefits have been explained. Nicotine levels in the infant from NRT while breastfeeding are low and are unlikely to be harmful. (38) Infant exposure can be reduced further by taking oral doses of NRT immediately after breastfeeding.

### Young people and NRT

Bupropion and varenicline are not approved for use by smokers under the age of 18 years. NRT can be used for adolescents under clinical supervision. When deciding whether to recommend NRT to an adolescent (12 years and over), it is important to consider nicotine dependence, motivation to quit, willingness to accept counselling and body weight. (24) If a young person's use of NRT is queried by a pharmacist owing to concerns of age, a letter from the referring health practitioner may assist.

## SECTION FOUR

# Barriers to quitting and useful tools to support clients to quit

## Barriers to quitting and strategies to overcome these

Concerns or barriers to quitting are a reality for most smokers and discussion can be very helpful to assist people to overcome these and to correct any misconceptions they may have.

| Concern or barrier                                         | Strategies to overcome                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prolonged cravings or withdrawal symptoms                  | Consider using NRT or other approved pharmacotherapy. If already using NRT, consider if 'under-dosing' is occurring or the need for combination therapy.                                                                                                                                                                              |
| Enjoyment of tobacco                                       | Use motivational interviewing techniques to explore what the client likes and doesn't like about smoking.                                                                                                                                                                                                                             |
| Smoking relieves stress                                    | Debunk the myth around smoking and stress. Explore other ways of coping with stress such as progressive muscle relaxation and breathing techniques.                                                                                                                                                                                   |
| Fear of failure or relapse                                 | Ensure ongoing support and emphasise that most people who quit have made many attempts before they have been successful. Encourage client to keep trying and to learn from previous attempts.                                                                                                                                         |
| Flagging motivation or feelings of being deprived          | Reassure the client that these feelings are common. <ul style="list-style-type: none"><li>- Probe to identify if the client is engaged in periodic tobacco use.</li><li>- Emphasise that beginning to smoke (even a puff) will increase urges and make quitting more difficult.</li><li>- Recommend rewarding activities.</li></ul>   |
| Concern for weight gain                                    | Emphasise the importance of a healthy diet and lifestyle. Discourage strict low kilojoule dieting.<br>Recommend starting or gradually increasing physical activity.<br>Refer the client to a weight management program, if appropriate.                                                                                               |
| Lack of support                                            | Identify a trusted health professional for the client to contact. Arrange follow-up for the client.<br>Help the client identify sources of support within his or her environment such as family and friends.<br>Refer the client to the Quitline 13 7848 (13 QUIT) or to <a href="http://www.iCanQuit.com.au">www.iCanQuit.com.au</a> |
| Negative mood or depression not associated with withdrawal | If significant, provide or organise for counselling, or refer the client to a general practitioner or specialist.                                                                                                                                                                                                                     |
| Being around other tobacco users                           | Encourage the client to request support from friends and family members and avoid situations that will be triggers for smoking.                                                                                                                                                                                                       |
| Limited knowledge of effective treatment options           | Provide education and support for the range of treatment options available.                                                                                                                                                                                                                                                           |

Source: US Dept. of Health and Human Services: *Treating Tobacco Use and Dependence: 2008 Update*. (20)

## Dealing with stress

Many smokers believe that they cannot manage stress in their lives without smoking and this can become a major barrier to quitting and staying quit. It is common for smokers to mistake withdrawal stress for general stress. As nicotine has a very short half-life (the time when the drug effect wears off) of up to two hours, smokers are constantly experiencing withdrawal, (which is

uncomfortable or stressful) and will always feel better by smoking as this tops up their nicotine levels and releases 'feel-good' chemicals such as dopamine in the brain.

When the smoker experiences some general stress (such as an argument with a friend or getting caught in traffic) and has a cigarette, they are topping up their nicotine levels and releasing dopamine thereby providing a temporary feeling of relief

which can be wrongly interpreted as the cigarette having helped to manage the stressful situation.

The cost of smoking also impacts on financial stress for many smokers. As smoking is now concentrated around the lowest quintile of socio-economic status, the financial burden is greater proportionate to income and this leads to poor economic choices and maintains the stress of poverty. The broadening of environmental restrictions on where people are permitted to smoke means many smokers experience stress in relation to where they can go to have their next cigarette.

## Tools to support quitting

### NSW Quitline (13 7848 or 13 QUIT)

Talking, even briefly with a professional Quitline Advisor can increase the chances of quitting and staying quit. The Aboriginal Quitline, the Multilingual Quitlines and NSW Quitline are confidential telephone based services provided by fully trained health professionals, designed to help smokers quit smoking. The staff can also provide assistance to the family and friends of smokers and others requesting information about smoking.

Calls to Quitline provide access to professional Quitline Advisors who use motivational interviewing techniques and other counselling methods to explore in a non-threatening way, how a client feels about their smoking behaviour. Quitline Advisors can explore with callers the different options that are available that can assist them to quit and stay quit. A free call back follow-up service is offered to callers. Free 'Quit Kits' are also available.

The Aboriginal Quitline (13 7848 or 13 QUIT) can provide callers with access to Advisors who have been trained to support Aboriginal people with quitting. Aboriginal Quitline Advisors are available. The Aboriginal Quitline provides a tailored, personal service and can provide training and resources for the NSW community and its workers.

Quitline is able to assist and encourage clients whether they are ready to quit or not.

Multilingual Quitlines provide access to professional bilingual Quitline Advisors: Arabic (1300 7848 03), Chinese (1300 7848 36) and Vietnamese (1300 7848 65). Messages may be left in Korean on 1300 7848 23. An Interpreter Service is available for Korean and other languages.

A referral to Quitline is suitable for clients who are ready to quit and those who are considering the possibility of quitting. Referral to Quitline is best done using the Quitline fax referral form that can be downloaded from the NSW Health website at [www.health.nsw.gov.au/tobacco/Pages/quitline-referral-forms.aspx](http://www.health.nsw.gov.au/tobacco/Pages/quitline-referral-forms.aspx)

It is recommended that Fax referral forms be distributed to all staff and clinicians at the service so they can use them for referring clients who require additional quit support and advice. For more detailed information on NSW Quitline and the iCanQuit website, refer to Appendix 4.

### Motivational interviewing

Motivational interviewing is a proven counselling technique to help explore a client's ambivalence about their smoking behaviour. It has been found to encourage a quit attempt among smokers who are in the contemplative or pre-contemplative stages.

The Health Education and Training Institute (HETI) have developed an online module on motivational interviewing. The module, *An introduction to motivational interviewing* can be accessed at the following link: [www.heti.nsw.gov.au/courses/an-introduction-to-motivational-interviewing](http://www.heti.nsw.gov.au/courses/an-introduction-to-motivational-interviewing)

The module provides an overview of the fundamental skills, principles and strategies used in motivational interviewing and is applicable for all nursing, midwifery, medical, allied health and clinical support staff and may qualify staff for up to 0.4 hours of continuous professional development. The second module, *Building Skills in Motivational Interviewing* was almost complete at the time of publication. Visit the HETI online website to search for this module: [www.heti.nsw.gov.au](http://www.heti.nsw.gov.au)



## Motivational interviewing in a nutshell

Motivational interviewing is a guiding, non-confrontational, client-centred counselling strategy aimed at increasing a person's motivation to change. The strategy assumes equity in the client-counsellor relationship and emphasises a client's right to define his/her problems and choose his/her own solutions. It is a counselling style based on collaboration rather than confrontation, evocation rather than education and autonomy instead of authority. Motivational interviewing involves open-ended questions, reflective listening and summarising.

### Techniques of motivational interviewing include:

1. Expressing empathy and accepting and respecting the client's position.
2. Developing discrepancy between present behaviour, values and goals.
3. Rolling with resistance. Confrontation only creates defensive behaviour.
4. Supporting self-efficacy to strengthen the client's belief in the potential for change.
5. Personalising the intervention and supporting the client to present the argument for change.
6. Being non-judgmental.
7. Being positive and demonstrating your own belief that people can change.
8. Understanding that the client takes responsibility for decisions and consequences.

Adapted from: Richmond et al. 1991. (23)

For more detailed information about motivational interviewing, refer to Appendix 5.

## Carbon monoxide (CO) monitoring

A carbon monoxide (CO) monitor, or smokerlyzer, is a recognised tool to support motivational interviewing strategies during a brief intervention. It measures the client's expired CO levels and over time will show the decline in levels of CO as smoking is reduced or ceased. A smokerlyzer reinforces the

client's motivation to quit by providing visible proof of a drop in damaging CO levels and charting the client's progress during their quit journey. The smokerlyzer measures the carbon monoxide in the breath simply by blowing into the monitor through a disposable mouthpiece.

For detailed guidelines on using a smokerlyzer, refer to Appendix 6.

## Coping tips for clients who are trying to quit

- Follow the "Not one puff" rule, as this can lead to regular smoking again.
- Ask people around you not to smoke and never buy, hold or light cigarettes for others.
- Do something active when the urge to smoke hits such as a walk, swim or cycle.
- Change your routine so you have something else to do at the times and places you used to smoke.
- Talk to your GP, pharmacist, cessation specialist or Quitline about using pharmacotherapy.
- Contact Quitline 13 7848 (13 QUIT) or visit [www.iCanQuit.com.au](http://www.iCanQuit.com.au) for support.
- Download the MyQuitBuddy smart phone app at: [www.quitnow.gov.au/internet/quitnow/publishing.nsf/Content/quit-buddy](http://www.quitnow.gov.au/internet/quitnow/publishing.nsf/Content/quit-buddy)
- Congratulate yourself every time you beat the urge to smoke.
- Treat yourself occasionally with the money you have saved by not smoking.

## Managing nicotine dependence in the hospital setting

### Providing quit advice prior to hospital admission

Smokers undergoing surgical procedures are at increased risks of poor wound healing and wound infection. Clients who smoke and are planning to undergo procedures including orthopaedic, bowel, micro, plastic and reconstructive surgery should be informed that surgical outcomes are enhanced if they quit smoking at least four to six weeks prior to their admission date. (9)

Smoking cessation care and advice provided during a pre-operative consultation will enable clients who smoke to prepare for not smoking during their future hospital stay. It may also assist with longer term abstinence from smoking. (39) For clients who have or intend to quit, clinicians should review the client's regular medications and adjust the dosage if necessary. Refer to the table 'Medications that interact with smoking' on page 27 of this resource.

### Encourage NRT prior to admission

Clinicians are encouraged to discuss with their clients the option of using NRT including the patch and/or oral forms of NRT to manage withdrawal symptoms prior to admission to hospital.

### Supporting clients in hospital

Hospitalisation may increase a smoker's motivation to quit because illness, especially if tobacco related, increases a smoker's perceived vulnerability to the harms of tobacco use and provides a 'teachable moment' for change. (40) The provision of brief intervention and NRT in hospital is an effective preventive health strategy. Benefits include reduced risk of disease, improved postoperative recovery, reduced length of stay and lower readmission rates. (41)

Clients with smoking related disease or risk factors for cardiovascular disease such as diabetes, lipid disorders or hypertension who continue to smoke greatly increase their risk of further illness (22).

### Did you know

Smoking is an independent risk factor for Type 2 diabetes and increases the risk of developing metabolic syndrome.

On admission, all clients should be asked whether they smoke tobacco products or cannabis mixed with tobacco and their smoking status should be recorded in their medical record.

Clients who smoke should be provided with brief intervention and offered support to manage their nicotine dependence while in hospital. This would include the use of NRT (including oral forms and patch), unless contraindicated. Clients should be provided with a type and amount of NRT that will control nicotine withdrawal symptoms throughout the day. An oral form of NRT is often required in addition to the patch to manage cravings. A positive experience of how NRT can manage withdrawal symptoms in hospital may result in a quit attempt in hospital or on discharge.

### Monitoring NRT and nicotine withdrawal in hospital

It is important to monitor nicotine withdrawal symptoms, NRT dosages and any side effects experienced by clients who are attempting to quit smoking while in hospital. Monitoring provides useful feedback and allows NRT to be adjusted to minimise withdrawal symptoms and side effects.

### Provision of NRT within health facilities

While NRT is an unscheduled medicine and can be purchased over the counter in pharmacies and supermarkets, there is a duty of care involved when NRT is provided by a health professional within a health care setting. This includes checking for contraindications, precautions and drug interactions and advising clients on potential side effects, dosage and types of NRT.

The provision of NRT in a clinical setting is akin to the administration of medication. Competency to administer medications is included in the qualifications of medical practitioners, midwife practitioners, nurse practitioners, registered nurses, registered midwives and enrolled nurses. Other appropriately trained staff members may be authorised to administer certain medications within their context of practice at their particular facility in accordance with local clinical protocols or guidelines. Facilities must ensure all persons authorised to administer medicines (including NRT) have completed appropriate training that addresses the necessary tasks, and as appropriate be re-assessed for those tasks.

For details about the eligibility of staff to administer medications such as NRT refer to Section 7 of the NSW Policy Standard *Medication Handling in NSW Public Health Facilities* [www.health.nsw.gov.au/policies/pd/2013/PD2013\\_043.html](http://www.health.nsw.gov.au/policies/pd/2013/PD2013_043.html)

### **Providing a variety of NRT options in health facilities**

To be effective and meet the varied needs of clients and staff who smoke, hospital pharmacies should stock a range of NRT products including nicotine patches as well as oral NRT products such as gum, lozenge and inhalator.

A sample checklist for the assessment and provision of NRT to clients within health facilities is provided at Appendix 7.

### **Providing encouragement and support to quit**

It is important that clients who are trying to manage their nicotine dependence and/or quit while in hospital are given plenty of encouragement and support to do so. A visit from a smoking cessation advisor or specialist tobacco counsellor to provide positive reinforcement and discuss coping strategies would be helpful. It is also recommended that phone calls and/or a referral to Quitline 13 7848 (13 QUIT) be arranged while the client is in hospital.

### **Providing resources**

Brief interventions should be supported by the use of appropriate resources. The NSW Ministry of Health produces a range of smoking cessation fact sheets, brochures and smoke-free posters well suited for use in health and community settings. These resources can be viewed, downloaded and ordered from the NSW Health website: [www.health.nsw.gov.au/quittingsmoking/Pages/default.aspx](http://www.health.nsw.gov.au/quittingsmoking/Pages/default.aspx)

It is also important that access to interpreters and culturally appropriate resources in a range of community languages is provided for clients from culturally and linguistically diverse backgrounds. A range of resources covering tobacco smoking and quitting in different languages are available at [www.mhcs.health.nsw.gov.au/topics/Smoking.html](http://www.mhcs.health.nsw.gov.au/topics/Smoking.html)

### **Supporting clients at hospital discharge**

Smoking cessation counselling and treatments that begin during hospitalisation and include supportive contacts for over one month after discharge greatly increase the odds of abstinence at six to twelve months compared to smoking cessation interventions provided during hospitalisation alone. (40) Clients who quit smoking in hospital after having a heart attack or cardiac surgery and remain quit after leaving hospital can decrease their risk of death by at least a third. (42)

All clients should be followed up after discharge to reinforce quitting and to make any adjustments to medications if the client resumes smoking. (Refer to the table 'Medications that interact with smoking' on page 27 of this resource). This may be the role of the client's general practitioner, prescriber or the local area cessation service.

### Suggested actions at discharge for all clients who smoke

- **Ask:** “Do you want to stay quit after discharge?”
- **Advise:** “The best thing you can do for your health is to remain quit or continue quit attempts”
- **Provide a minimum three day supply of an NRT product** that has been tried and administered in hospital. This will also support clients if there are any delays or difficulties in accessing a local pharmacy for further supplies.
- **Inform** client of the PBS nicotine patches and offer a referral to the client’s GP to obtain a PBS script for the patch.
- **Provide smoking cessation information** including information about the benefits of quitting, strategies for addressing cravings and withdrawal symptoms.
- **Refer** to Quitline 13 7848 (13 QUIT) for ongoing support, including free call backs and assistance to develop a personalised Quit Plan. Offer to fax the Quitline referral form. Also provide details of any local area cessation services and programs.
- **Make a follow-up appointment** with a smoking cessation advisor (if available) or offer a referral at the time of discharge.

### More intensive interventions

Smokers with significant psychological and/or physical comorbidities are likely to require a more intensive intervention to that offered through the brief intervention. The level of support a person needs to stop smoking will depend on many factors including the person’s degree of nicotine dependence, conditions or circumstances that may make quit attempts more difficult and the person’s ability to cope with disruptions to their day-to-day patterns of behaviour and mood.

Clients who have particular needs, are harder to treat or who have unsuccessfully tried other methods, may benefit from more intensive support programs such as quit groups, quit courses or individual counselling.

Most health services now have trained tobacco treatment specialists working in respiratory medicine, drug and alcohol and/or mental health. There are also qualified health professionals nationwide that individuals may access when more intensive help is required. The Australian Association of Smoking Cessation Professionals (AASCP) has a national list of accredited tobacco treatment specialists that practice evidence-based interventions. These clinicians are accessible through most health care services at [www.aascp.org.au](http://www.aascp.org.au)

There are a number of ineffective and unproven approaches to smoking cessation. For a discussion of these methods, refer to The Royal Australian College of General Practitioners, *Supporting smoking cessation: a guide for health professionals*, updated July 2014. (22)

SECTION SIX

## Supporting technical information

### Adjusting medications at the onset of smoking cessation

Chemicals in tobacco smoke accelerate the metabolism of many commonly used drugs by inducing the cytochrome P450 enzyme, CYP1A2. When the client quits or significantly cuts down on smoking, the dose of these medications may need to be **reduced** to match the drop in metabolism. The table below lists the drugs that need to be monitored and may require dosage adjustment.

For more detailed information on drug interactions with smoking refer to *Medication interactions with smoking and smoking cessation* fact sheet on the NSW Health website at [www.health.nsw.gov.au/tobacco/Pages/practical-clinical-tools-for-managing-smoking-in-people-with-mental-illness.aspx](http://www.health.nsw.gov.au/tobacco/Pages/practical-clinical-tools-for-managing-smoking-in-people-with-mental-illness.aspx)

#### Medications that interact with smoking

| Class                | Medication                                                             | Dosage to be reduced or increased         |
|----------------------|------------------------------------------------------------------------|-------------------------------------------|
| Antipsychotics       | olanzapine, clozapine                                                  | decreased                                 |
| Antidepressants      | duloxetine, fluvoxamine, tricyclic antidepressants, mirtazapine        | decreased                                 |
| Antianxiety agents   | aprazolam, oxazepam, diazepam                                          | decreased                                 |
| Cardiovascular drugs | warfarin, propranolol                                                  | decreased                                 |
|                      | verapamil, flecainide                                                  | decreased                                 |
|                      | clopidogrel                                                            | increased                                 |
| Diabetes             | insulin, metformin                                                     | decreased                                 |
| Other                | naratriptan, oestradiol, ondansetron, theophylline, dextropropoxyphene | decreased                                 |
| Other                | caffeine, alcohol                                                      | decreased – recommend intake to be halved |

Source: RACGP: *Tobacco smoking: options for helping smokers to quit* (43)

### Effects of nicotine on the body

Nicotine is the component of inhaled cigarette smoke responsible for drug dependence but it is not the main component responsible for the harmful health effects of smoking. (22)

Nicotine acts as an agonist at cholinergic receptors in both the peripheral and central nervous systems and causes the release of a number of neurotransmitters including dopamine, noradrenalin, acetylcholine and serotonin. (44)

| System                  | Nicotine effects                                                                                                         |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Central nervous system  | 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 level.                   |
| Metabolic system        | Increased basal metabolic rate                                                                                           |
| Gastrointestinal system | Decreased appetite and nausea                                                                                            |
| Skeletal muscle         | Decreased muscle tone                                                                                                    |

Cigarette smoking produces rapid dosing of nicotine. Nicotine is readily absorbed from the respiratory tract, oral mucosa and to a lesser extent through skin. There is minimal absorption through the gastrointestinal tract when administered orally. Cigarettes are a highly effective mechanism for delivering nicotine quickly to the brain. Inhaled nicotine takes about 10-19 seconds to reach the brain when administered through the respiratory tract and pulmonary circulation. (45)

A typical smoker will take 10 puffs on a cigarette over a period of five minutes after the cigarette is lit. (46) As nicotine is rapidly and extensively metabolised, primarily in the liver (average half-life two hours), the smoker has a number of peaks and troughs of nicotine absorption through the day. This has the effect of promoting addiction as the smoker experiences early withdrawal effects such as craving and irritability when nicotine levels decrease. (45)

### Did you know?

Smokers who consume 30 cigarettes per day have been estimated to get approximately 300 'hits' of nicotine to the brain each day. (47)

## Nicotine dependence

Tobacco use produces nicotine tolerance and dependence which causes withdrawal symptoms and makes controlling future use difficult. (24) The bolus of nicotine to the brain achieved by smoking is one of the key reinforcers of dependence. (45)

Features of nicotine dependence include:

- smoking within 30 minutes of waking
- smoking more than 10 cigarettes a day
- a history of withdrawal symptoms in past quit attempts
- smoking when ill
- reporting the first cigarette of the day to be the one most difficult to give up

Smokers appear to be motivated by both positive reinforcement (including reduced stress, reported relaxation, alertness, improved concentration, mood regulation and lower body weight) and negative reinforcement (relief of nicotine withdrawal symptoms in the context of physical dependence). However, it is difficult to separate reported positive reinforcement from relief of withdrawal symptoms. (45)

## Nicotine withdrawal

Nicotine withdrawal produces a variety of symptoms when smoking is ceased. These symptoms decrease over time, as the body adapts and returns to its drug-free state. However for many smokers trying to quit, the symptoms can be unpleasant and distressing.

People with a mental illness may confuse nicotine withdrawal symptoms with a worsening of their mental health condition/s. Behavioural changes are often experienced and these are similar to those experienced by many clients with depression, including a diminished ability to respond to pleasurable stimuli. These symptoms are thought to arise from reduced dopamine flow in certain parts of the brain. (48)

The American Psychiatric Association publication DSM-5 (49) defines tobacco withdrawal as abrupt cessation of tobacco use, or reduction in the amount of tobacco used, followed within 24 hours by four (or more) of the following signs or symptoms:

- depressed mood
- irritability, frustration, anger
- anxiety
- restlessness and difficulty concentrating
- increased appetite
- insomnia

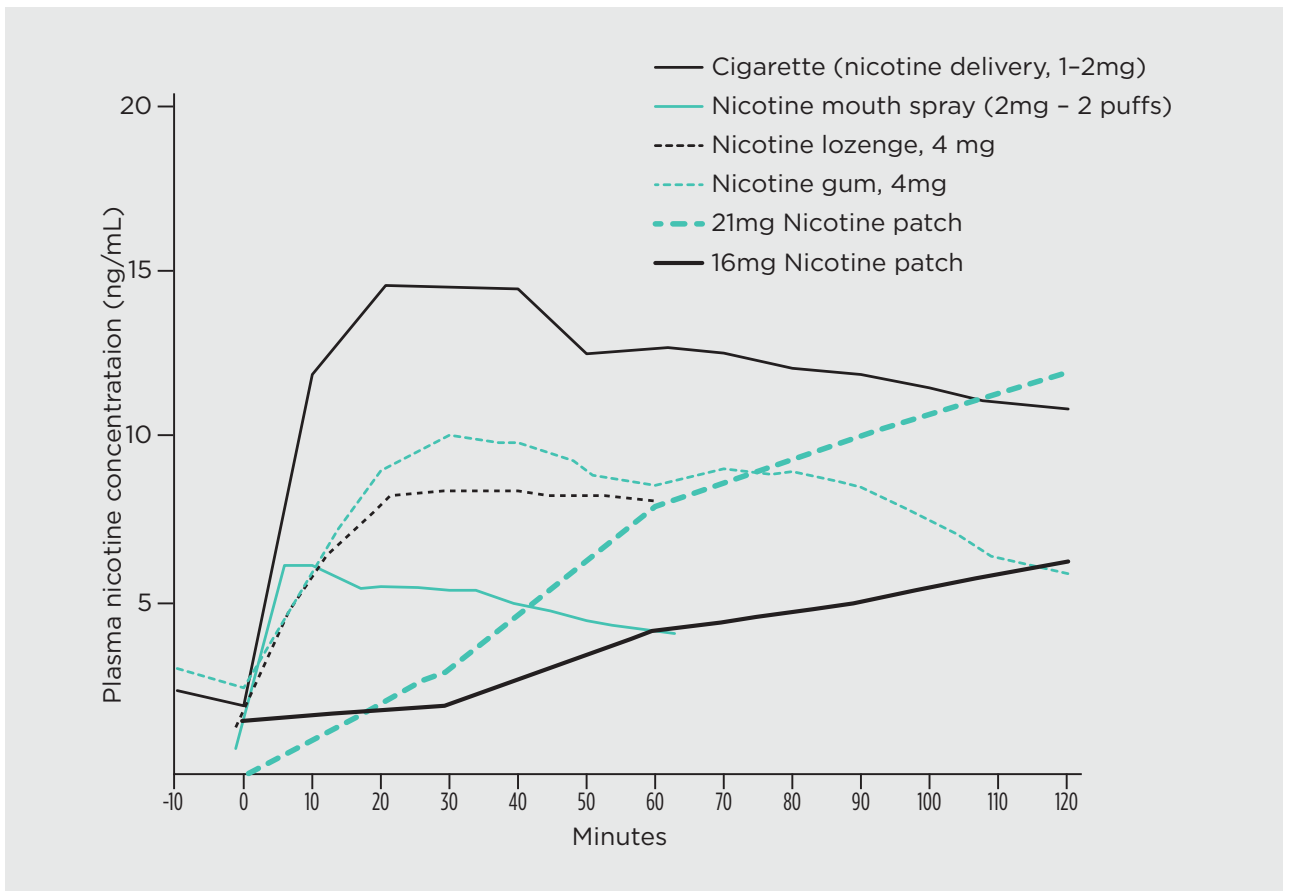
Other withdrawal symptoms include the urge to smoke, disturbed sleep, craving for sweet or sugary foods, decreased heart rate, constipation, nausea, dizziness, coughing, mouth ulcers and sore throat. (22) Most symptoms usually abate by four weeks after quitting, with the exception of increased appetite and decreased heart rate, which may persist for longer than 10 weeks. The urge to smoke, especially when under stress, may remain for much longer.

## Blood plasma nicotine levels related to tobacco smoking

A smoker's nicotine plasma levels just two minutes after smoking a cigarette may range from 10-80ng/ml irrespective of brand, strength, number of cigarettes per day or past history of smoking. The majority of smokers when using a single type of oral NRT receive plasma levels of around 15ng/ml at most. (50)

The figure below illustrates the differences in blood plasma levels of nicotine from cigarette smoking compared to different forms of NRT used at recommended levels. It is clear from the graph that while NRT delivers nicotine into the bloodstream, it is at lower levels than that delivered by cigarettes.

### Blood plasma levels for NRT products vs. cigarettes



Source: *The Health Consequences of Smoking - 50 Years of Progress. A Report of the Surgeon General, 2014*  
Adapted from Fant et al. 1999 with permission from Elsevier © 1999.

Note: **mg** = milligrams; **ng/mL** = nanograms per millilitre.

## Creating a supportive environment

### Embedding smoking cessation into routine practice

The U.S. Surgeon General's report: *Treating Tobacco Use and Dependence: 2008 Update (20)* states that changes are needed in health care systems to support clinician-led smoking cessation interventions. The evidence shows that health care policies significantly affect the likelihood that smokers will receive effective smoking cessation treatment and successfully stop tobacco use. The report emphasises the importance of embedding smoking cessation brief interventions into routine practice to ensure that tobacco use is systematically assessed and treated at every clinical encounter.

Health professionals working in hospital wards, clinics, community health settings and home visiting programs should include processes and systems for routinely identifying smokers and for providing advice and support for clients to quit. These settings vary considerably and it is important that local protocols and procedures are implemented that will routinely enable the delivery of brief advice about quitting smoking and referral of clients to support services such as the Quitline 13 7848 (13 QUIT) and the iCanQuit website at [www.iCanQuit.com.au](http://www.iCanQuit.com.au)

Workers and organisations in the community service sector are key stakeholders for tobacco control efforts with disadvantaged population groups. These workers often have existing relationships with disadvantaged groups in the community and are familiar with and skilled in promoting positive behaviour change among their clients.

Efforts to integrate tobacco intervention into the routine delivery of health care require a 'whole of organisation' approach that includes the active involvement of managers, clinicians and health care system administrators. Such integration represents an opportunity to increase delivery of tobacco dependence treatments, quit attempts, and successful smoking cessation.

### Getting ready for change

A structured and planned approach to implementing change is required within local service operations that will enhance the services' capacity to support routine brief smoking intervention practices. To start the change process, it is recommended that senior management support is secured, there is close consultation with staff of the service and that a realistic timeframe is established. Four phases have been identified for implementing brief intervention into routine practice for health services. These include the preparatory phase, developmental phase, implementation phase and review and maintenance phase. Refer to the table overleaf for suggested actions within each phase.

### Core elements for change

There are eight core elements for supporting the change process necessary to embed smoking cessation into routine clinical practice. These core elements have been identified from key organisational change and tobacco control literature from the United States and the United Kingdom. (51) (52)

The core elements are:

1. Service commitment and leadership
2. 'Whole of service' approach
3. Supportive environments
4. Policies and procedures
5. Education and training
6. Resources
7. Referral pathways
8. Monitoring, improvement and feedback

#### Core Element 1 – Service commitment and leadership

A sustained service commitment by managers, the provision of strong visible leadership and consistency in approach are all important for ensuring implementation of new processes and procedures. Prominent leadership is essential at all stages of implementation.

A strong message about the need to reduce the smoking rate, especially in disadvantaged groups, needs to be provided by management at the outset.



## Getting ready for change – Four phases for integrating brief intervention into routine practice

| Preparatory phase                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Developmental phase                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Implementation phase                                                                                                                                                                                                                                                                                                                                   | Review and maintenance                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>✓ Identify and ensure senior management support</li> <li>✓ Discuss and consult with staff: Where does brief intervention for smoking cessation fit into routine practices at our service?</li> <li>✓ Identify who will be leading the implementation process at the service.</li> <li>✓ Establish a working group to support implementation processes.</li> <li>✓ Agree on the role and tasks the working party will undertake (terms of reference)</li> <li>✓ Undertake a Systems Assessment Questionnaire (see Appendix 5)</li> </ul> | <ul style="list-style-type: none"> <li>✓ Communicate the decision to implement the brief intervention to the team and other service staff.</li> <li>✓ Identify gaps and areas that need attention and develop an implementation plan</li> <li>✓ Design a Communication Strategy</li> <li>✓ Hold first update for staff</li> <li>✓ Review current client assessment tools to ensure smoking status and treatment provided is being recorded</li> <li>✓ Develop a review process to monitor implementation such as KPIs and quality improvement activities eg health care record audits</li> <li>✓ Assess staff information, education training needs</li> <li>✓ Identify appropriate staff within the service or relevant LHD staff who can assist with the provision of information, education and training of staff</li> <li>✓ Establish the process for providing feedback to staff on implementation activities</li> <li>✓ Second update for staff</li> <li>✓ Identify resources (including culturally appropriate versions) that can be used to support brief interventions for smoking cessation in the service.</li> </ul> | <ul style="list-style-type: none"> <li>✓ Implement action plans</li> <li>✓ Update for staff</li> <li>✓ Commence training and education programs for staff</li> <li>✓ Create a supportive environment (display resource material)</li> <li>✓ Liaise with relevant LHD personnel and community members about local promotional opportunities.</li> </ul> | <ul style="list-style-type: none"> <li>✓ Undertake a review process for monitoring implementation such as reviewing achievements for the key performance indicators and quality improvement activities</li> <li>✓ Identify and note areas that need attention in consultation with staff</li> <li>✓ Update staff on progress and the outcome of the review process</li> <li>✓ Develop a plan for addressing these and schedule new review check points</li> </ul> |

This could be delivered as an announcement through team meetings and reinforced through existing communication processes such as staff email, intranet facilities, service newsletters and other types of service/staff communications.

A consultative approach to the implementation process should be adopted and continually utilised that involves key local site staff, relevant Local Health District staff and local community members. Team members are the ones that are being asked to be part of a systems approach to delivering brief interventions so they need to be given an opportunity to identify barriers, air their

concerns and say how they think the process will work best.

Initially staff may have a number of concerns about addressing smoking with their clients. These concerns can range from not having enough time to address smoking because of the other important issues that require attention, a lack of confidence and skills to talk about smoking with clients and a feeling of being hypocritical because they themselves may be a smoker.

Follow-up with staff is also important to identify solutions early in the planning process and commit to review these along the way. It is also important

to build an effective partnership with other health service providers such as Medicare Locals, chronic care teams, pharmacy, oral health practitioners, local community organisations and Quitline. This will enable services to effectively work together with their local communities.

### **Core Element 2 – ‘Whole of service’ approach**

A ‘whole of service’ approach is crucial to delivering brief interventions for smoking cessation. If the responsibility to encourage smoking cessation lies with just one or two members of the team, it is less likely that organisational commitment needed to make a difference will be sustained. It is acknowledged that not all members of the team have a clinical relationship with clients where they can deliver brief interventions. However, everyone on the team can play a part in promoting smoking cessation.

The System Assessment Questionnaire in Appendix 8 can be used to conduct a systems audit. This will help to identify gaps and barriers to systematically conducting brief interventions. Use team meetings to identify potential solutions and establish a working group to support implementation processes with representation from a broad range of staff and services.

### **Core Element 3 – Supportive environment**

It is important that the workplace supports the smoke-free message and actively promotes the facility as a smoke-free workplace for the health and welfare of staff, visitors and clients. The NSW Health Smoke-free Health Care Policy (The Policy) seeks to provide a clear and consistent message that, with the exception of designated outdoor smoking areas as determined by NSW public health organisations, NSW Health buildings, vehicles and grounds are smoke-free. The policy also outlines the responsibility of the health care sector to encourage and support all clients and staff who are smokers to quit smoking.

The Policy, as it applies to banning the use of cigarettes in health facilities, also applies to the use of electronic cigarettes. This is to eliminate

the risks of exposure to particulate matter emitted by second-hand vapour in NSW Health facilities. The NSW Health Smoke-free Health Care Policy can be accessed from: [www.health.nsw.gov.au/policies/pages/default.aspx](http://www.health.nsw.gov.au/policies/pages/default.aspx)

If the Policy is not being adequately implemented in your service, this can send mixed messages to clients. Review the implementation of the Smoke-free Health Care policy in your service and if required discuss ways to achieve better and ongoing compliance.

Remind staff who smoke that they need to respect the organisation’s Smoke-free Health Care Policy and only smoke in places where smoking is permitted. Visitors to the Health Service also need to know about the Smoke-free Health Care policy. Signage should be visible and brochures available that explain the Policy.

### **Core Element 4 – Policies and procedures**

There is evidence that strategies such as smoker identification systems, policies and environmental prompts that facilitate the delivery of tobacco dependence treatment have the potential to substantially improve population abstinence rates. It has been estimated that, over time, widespread implementation of such strategies could produce a 2-3.5 per cent reduction in smoking prevalence rates. (20)

Policies and procedures are an important part of the continuous quality improvement process and ensure that processes or interventions are performed in a consistent way that meets the needs of the team or service. Well-defined and documented processes can demonstrate an effective system and assist in building good internal communication practices.

When policies and procedures are in place, all members of the team are clear about their role and the actions that need to be taken. Community organisations seeking guidance on what to include in their organisation’s policy are advised to

### **Supporting staff who smoke**

Staff who smoke, should be made aware of smoking cessation support available to assist them to quit smoking and/or manage nicotine dependence. This includes a minimum of four weeks free NRT per year and access to Quitline services during working hours. LHDs may choose to provide more than four weeks free NRT to staff members and extend the offer to the provision of combination therapy (nicotine patch and oral NRT). The hospital pharmacy is encouraged to stock a variety of NRT products for use by staff and clients.

download a copy of the *Addressing Smoking in Community Service Organisations policy toolkit* from the Tackling Tobacco website at: <http://askthequestion.com.au/download-resources/>

It is recommended that brief interventions be included in job descriptions of relevant staff and monitoring processes developed to track outcomes, performance and effectiveness. Allocation of staff to undertake audits of practice, review and update procedures and clinical pathways will help to support brief intervention practices.

### Core Element 5 - Training

Education and training are important for developing an informed, supportive and skilled workforce. Health professionals who receive smoking cessation training are significantly more likely to intervene with smokers than those who have not attended the training. Many clinicians report a lack of relevant knowledge as a barrier to intervening with clients who smoke. (24)

Smoking cessation training should be a core health activity and a process should be established to monitor who has received smoking cessation training. Training sessions should highlight best practice and the strong evidence and acceptance that brief interventions are effective. They should also include information on the disproportionately high rates of smoking among socioeconomic disadvantaged populations, for example, Aboriginal and Torres Strait Islander people, some culturally and linguistically diverse groups, those with significant mental health issues and people in correctional facilities.

### Core Element 6 - Resources

Brief interventions should be supported by the use of appropriate resources. The NSW Ministry of Health produces a range of tobacco fact sheets, brochures and smoke-free posters well suited for use in health and community settings. These resources can be viewed, downloaded and ordered from the NSW Health website: [www.health.nsw.gov.au/quittingsmoking/Pages/default.aspx](http://www.health.nsw.gov.au/quittingsmoking/Pages/default.aspx)

A number of other resources are also available – see Section 9 for a list of organisations and websites that offer smoking cessation resources.

It is important that access to interpreters and culturally appropriate resources in a range of community languages is provided for clients from culturally and linguistically diverse backgrounds. A range of resources on tobacco smoking and quitting in different languages are available at [www.mhcs.health.nsw.gov.au/topics/Smoking.html](http://www.mhcs.health.nsw.gov.au/topics/Smoking.html)

Resource stocks need to be well managed. Identify staff who will be responsible for ordering, monitoring and displaying posters and other resource material that promote positive 'no smoking' messages, smoke-free environments, quit advice and referral. Position these in waiting rooms, client meeting rooms and practitioners' consulting rooms.

Identify the processes for communicating information about resource management to new and existing staff, so all staff members can contribute to the service's commitment to promoting positive no smoking messages at the service.

#### Smoking cessation training available in NSW

- The NSW Health Smoking Cessation Trainer provides free smoking cessation training for workers/ organisations in NSW. The Smoking Cessation Trainer is based at the NSW Quitline.
- Brain and Mind Research Institute at the University of Sydney provides training courses where participants gain in-depth knowledge and skills in nicotine addiction and smoking cessation to work in primary and allied healthcare as a tobacco treatment and smoking cessation specialist. Courses include a three day intensive interventions course; a two day brief interventions course; and a three day course with more focus on mental health. <http://sydney.edu.au/bmri/courses/continuing-professional-development/smoking-cessation.php>
- Aboriginal Health and Medical Research Council (AH&MRC) Aboriginal Health College Smoking Cessation Skills Set/ Tobacco Resistance and Control short course. [www.ahc.edu.au](http://www.ahc.edu.au)
- Check the Health Education and Training Institute (HETI) website for on-line training courses in smoking cessation and motivational interviewing. [www.heti.nsw.gov.au/](http://www.heti.nsw.gov.au/)
- Many Local Health Districts develop their own smoking cessation training programs that are offered to local staff.

## Core Element 7 – Referral pathways

For some services, providing short, opportunistic advice on smoking cessation and encouragement to quit will be the most realistic option. Other services may have clinicians who have been trained in smoking cessation and have time available to deliver more intensive interventions. It is important for team members to know where people can find extra support to assist them to provide effective advice to their clients.

The NSW Quitline 13 7848 (13 QUIT) provides a free, confidential and individually tailored service to assist people in the process of quitting smoking. Quitline should be an integral part of the referral process. More information on Quitline can be found in Section 4 and Appendix 4.

In addition to Quitline, there may be locally based smoking cessation programs that clients can be referred to on discharge, or if they are seeking additional group support in their local community. Actively disseminate information about the Quitline and any locally based cessation programs or smoking cessation specialists through a range of communication channels including local service email lists, intranet, newsletters, flyers for waiting rooms and notice boards.

The Australian Association of Smoking Cessation Professionals (AASCP) has a national list of accredited tobacco treatment specialists that practice evidence-based interventions. These clinicians are accessible through most health care services at [www.aascp.org.au](http://www.aascp.org.au)

## Core Element 8 – Monitoring and improvement

A systematic and comprehensive program of monitoring is important for successful integration of brief interventions into routine practice. Monitoring and review provides an opportunity to identify successes and weaknesses, obtain suggestions for improvements and to identify where adjustments to the systems may be necessary.

Identifying realistic performance indicators is a key strategy to support a systems approach to providing routine interventions. Ongoing feedback to the service's teams about the results of monitoring and review processes on the delivery of brief interventions, client satisfaction and any changes in smoking behaviour is key to the team's continued adherence to the system.

### Tip

Ensure referral to, or information on Quitline 13 7848 (13 QUIT), cessation specialists and/or local cessation programs is included in the client discharge package to encourage and support continuation of smoking cessation after discharge.

## Integrating brief interventions into routine practices using quality improvement principles

### Identify:

- What information and processes will be reviewed.
- How often audits and reviews will be carried out.
- If clients who are referred to the Quitline or a cessation program should be followed-up and included as an outcome indicator.
- How the results of audits and other monitoring processes and subsequent improvement processes are to be fed back to the team and to management.

### Identifying the performance indicators that will be used such as:

- % of clients who have had their smoking status recorded
- % of smokers offered brief advice to quit
- % of smokers referred on to Quitline and/or local cessation program
- % of clients satisfied with the information provided
- % of clients who quit smoking (measured using CO monitor readings)

## SECTION EIGHT

# Working with groups with high smoking prevalence

Any group that is disadvantaged or marginalised for any reason are more likely to be substance users including users of tobacco and should have access to smoking cessation advice, support and services. The *NSW Tobacco Strategy 2012 - 2017* has a focus on strategies that target these groups in an effort to reduce the associated disproportionate levels of tobacco related death and disease. (6) (11)

Smoking rates are high among Aboriginal people, those who in NSW correctional facilities, those from low socioeconomic groups, those with a mental illness or drug and alcohol dependency and those from some culturally and linguistically diverse groups.

Low socioeconomic status groups are more likely to have a higher level of nicotine dependence and be less confident about their ability to quit in the face of increased barriers to quitting. (12) For a detailed account of Smoking and social disadvantage in Australia, refer to Chapter 9 of Cancer Council Victoria's online resource *Tobacco in Australia; Facts and Issues* available from [www.tobaccoinaustralia.org.au/chapter-9-disadvantage](http://www.tobaccoinaustralia.org.au/chapter-9-disadvantage)

### Aboriginal people

The Australian Aboriginal culture is the longest surviving culture on the planet. To preserve this unique culture we must address the smoking rates amongst the Aboriginal community. Tobacco smoking is a significant factor in the poorer health status and lower life expectancy of Aboriginal people who continue to experience high rates of cardiovascular disease, respiratory disease and many other diseases which are related to tobacco use. (59)

Smoking rates in the general population have decreased in past decades as have smoking rates among Aboriginal people however the smoking rate among Aboriginal people remains high. Over the last decade, the daily smoking rate among Australian Aboriginal people has decreased from 53 to 43 per cent however there has been no significant changes in rates in remote communities

or a significant drop in the rates in the peak reproductive age group of 25–34 years for either gender. (60) Smoking rates for Aboriginal pregnant women are approximately five times that of non-Aboriginal women (49.9% for Aboriginal women in 2012 versus 9.1% for non-Aboriginal women) (60)

Research indicates that Aboriginal smokers are interested in quitting. A survey commissioned by the Cancer Institute NSW in 2012 into tobacco-related knowledge, attitudes and behaviour among Aboriginal people in NSW found that around three quarters (78%) of current smokers indicated a desire to quit in the next six months with 58 per cent of current smokers reporting strong feelings about quitting immediately. (61)

Health and community sector staff who have contact with Aboriginal clients who smoke should take the opportunity to engage with these clients in a non-judgemental, culturally appropriate way to support them on their quit journey.

### **ATRAC Framework: A Strategic Framework for Aboriginal Tobacco Resistance and Control in NSW**

NSW Health and the Aboriginal and Health Medical Research Council of NSW (AH&MRC) collaborated to develop the *ATRAC Framework: A Strategic Framework for Aboriginal Tobacco Resistance and Control in NSW* (The Framework). (62) The Framework aims to guide and inform the efforts of anyone working in Aboriginal tobacco resistance and control. The actions recommended in the Framework are organised into six key areas:

1. Leadership, partnerships and co-ordination
2. Community action, awareness and engagement
3. Workforce development
4. Supportive environments
5. Quitting support
6. Evidence, evaluation and research.

The Framework was developed following comprehensive consultations with key stakeholders in Aboriginal communities. It is expected that the Framework will assist in planning and coordinating

## Aboriginal Quitline

The NSW Aboriginal Quitline 13 7848 (13 QUIT) is a service for the Aboriginal and Torres Strait Islander community and consists of an Indigenous Health Worker team led by an Aboriginal Quitline Coordinator.

The Aboriginal Quitline provides a tailored, personal service for clients including information on the PBS patches scheme (Refer to Appendix 3 and 4 for further information). The Aboriginal Quitline counsellors can also provide training and resources for the NSW community and its workers.

efforts to reduce Aboriginal smoking and related harms by supporting the integration and coordination of best practice approaches.

### **Quit for new life; a smoking cessation initiative for pregnant Aboriginal women and new mothers**

The *Quit for new life* program is a smoking cessation support initiative for women who identify as having an Aboriginal baby. The program is an initiative of the Centre for Population Health, NSW Ministry of Health (MOH) in partnership with Kids and Families NSW.

The program is being delivered primarily through Aboriginal Maternal and Infant Health Services (AMIHS) and Building Strong Foundations for Aboriginal Children, Families and Communities (BSF) programs within LHDs. In some locations, other antenatal and postnatal services are also involved in delivering the program.

The program has been informed by the evidence of what is likely to be most successful in supporting Aboriginal women to quit smoking during the antenatal period and to remain quit in the postnatal period. Women attending participating *Quit for new life* services for antenatal and postnatal care are offered comprehensive smoking cessation support. This includes brief advice, educational resources, referral to Quitline, free Nicotine Replacement Therapy (also available for householders who smoke) and extended follow-up support. The sustainability of the program is being promoted through a focus on practice change strategies that embed comprehensive smoking cessation support into routine delivery of maternity care.

### **Training opportunities for staff**

All NSW Health staff are required to be culturally competent and have an understanding of the diverse culture, customs and protocols required to effectively deliver appropriate health care services to Aboriginal people. The Policy Directive *Aboriginal Cultural Training Framework: Respecting*

*the Difference* outlines the training requirements for all staff working in NSW Health. The Policy Directive can be downloaded from: [www.health.nsw.gov.au/policies/pd/2011/pdf/PD2011\\_069.pdf](http://www.health.nsw.gov.au/policies/pd/2011/pdf/PD2011_069.pdf)

The NSW Aboriginal Health College offers a short course entitled 'Smoking Cessation Skills Set / Tobacco Resistance and Control' for Aboriginal Health Workers and other health professionals interested in developing their knowledge and skills in relation to treatment and management of nicotine dependence, the quitting process, behavioural interventions, pharmacotherapies and other aspects of smoking cessation for Aboriginal people. The course can be undertaken as a stand-alone course over two study clusters (each a week long), or can contribute to a Certificate IV in Alcohol and Other Drug Work qualification. For further information contact the Aboriginal Health College at [www.ahc.edu.au](http://www.ahc.edu.au)

### **People in NSW correctional facilities**

People in NSW correctional facilities and those held on remand have very high smoking rates of almost 80% which is the highest of any distinct population group in the state. (53) People held in these facilities are more likely to be from disadvantaged backgrounds and have a history of mental illness and substance use.

The 2009 NSW Inmate Health Survey (53) found that the majority of prisoners who smoke do want to quit, yet despite quit smoking support being available in NSW prisons for over a decade, the rate of smoking remains high. This may be due to the unsupportive environment where smoking has been permitted in prisoners' cells creating a barrier to smoking cessation and exposing cell mates who do not smoke and prison staff who enter the cells to second-hand smoke.

NSW prisons are moving towards being smoke-free, with Health and Justice agencies working closely to reduce the harmful effects of tobacco on those in custody, including staff and visitors. In August 2014, the NSW Government announced plans

to implement a completely smoke-free prisons policy in 2015 throughout all NSW correctional centres. Pilots of a smoke-free buildings policy have taken place in the maximum security Lithgow Correctional Centre and in the new maximum security wing at Cessnock Correctional Centre.

### Quit Prison Line

All inmates who are smokers are to be encouraged to phone the Quit Prison Line. This line on the prison phone connects callers directly with a Quit prison counsellor. All Quit prison counsellors have been trained to take these calls and a system is in place that prioritises calls from inmates to ensure that they are answered promptly. Correctional facilities staff who smoke can also access cessation support for themselves by phoning the main Quitline number 13 7848 (13 QUIT).

### People with a mental illness

People with mental illness are more likely to smoke. An Australian literature review (54) on smoking and mental illness reported that smoking prevalence varies between groups with different mental illnesses. For example, smoking is more common among people with schizophrenia and substance abuse disorders than among people with major depression or anxiety. People with mental illness should be encouraged to quit. There is strong evidence that the majority of people with mental illness, when asked, want to quit smoking. (54)

Interventions that assist people in the general population to manage nicotine withdrawal (such as behavioural support and use of smoking cessation pharmacotherapies) are effective for mental health clients. (19) Most people with a mental illness do not experience a worsening in the symptoms of their illness when they stop smoking. Mental illness is not a contraindication to stopping smoking, however, it is important that these clients are monitored for an exacerbation of their illness and for under and overdosing of psychiatric medications. It is important to note also that many symptoms of nicotine withdrawal are similar to common symptoms of mental illnesses.

Case studies, resources and clinical tools relevant to supporting mental health clients with smoking cessation can be accessed from the NSW Health website at: [www.health.nsw.gov.au/tobacco/Pages/smoking-and-mental-illness.aspx](http://www.health.nsw.gov.au/tobacco/Pages/smoking-and-mental-illness.aspx)

### Smoking and drug interactions in clients with a mental illness

Chronic smoking increases the body's metabolic rate and can impact on the effectiveness of some medication used for the treatment of mental illnesses. Nicotine itself does not interact with psychiatric medications. It is the tar in cigarette smoke that induces certain liver enzyme activity (CYP450 1A2) which increases the metabolism of some medications. Smokers may therefore require larger doses of these medications.

When clients cease smoking, medication doses may need to be adjusted. Nicotine does not induce enzyme activity and therefore NRT does not affect these medications. Clinicians are advised to refer to the 'Medications that interact with tobacco smoking' table on page 27.

### Tip

People with mental illness are to be encouraged to quit smoking and provided with support in their quit attempts. Quitline counsellors are able to assist those with mental illness in their quit attempts.

The NSW Ministry of Health has developed a guideline for health professionals and administrators working in mental health facilities to support people with mental illness to manage nicotine dependence and withdrawal during their stay in a mental health facility. *Guidance for implementing smoke-free mental health facilities in NSW* is available at: [www.health.nsw.gov.au/policies/a-z/s.asp](http://www.health.nsw.gov.au/policies/a-z/s.asp)

### Monitoring clients with a mental illness

- Document client's current psychiatric medication and the presence of any side effects prior to smoking cessation and continue to monitor.
- Encourage clients to phone Quitline (13 7848) and/or make a Fax referral to Quitline
- Follow-up clients one to three days after reducing or quitting smoking to monitor symptoms and provide encouragement and support.
- Monitor clients weekly for the first four weeks – check for signs of psychotic relapse, onset of depressive illness and the need to change medication levels.
- Monitor monthly for as long as the client is being seen to support the client's quit attempt/s.
- Monitor clients' caffeine use before, during and after their quit attempts.
- Document client's smoking status on discharge for follow-up.

### People with other drug dependence issues

Smoking is common in people with other drug dependencies. The smoking rates for people in drug treatment programs have been estimated to be between 74 to 100 per cent. (25) Approximately 20 per cent or more of people seeking smoking cessation services have a history of alcohol abuse or dependence. (24) People who are dependent on alcohol are three times more likely than those in the general population to be smokers and people who are nicotine dependent are four times more likely than the general population to be dependent on alcohol. (55) Moreover, smokers with a history of alcohol problems tend to be more heavily dependent on nicotine and may experience more intense withdrawal symptoms and greater difficulty with cessation. (56)

A substantial proportion of drug and alcohol service clients are interested in quitting. (57) There is evidence that quitting smoking benefits other substance abuse problems. (24) Treatments for nicotine dependence do not interfere with a client's recovery from other drug dependence issues. Success in smoking cessation for people with opiate dependence is lower than the general population, highlighting the importance of

monitoring and supporting people with substance-use problems. (22) (54)

Systematic intervention using the 5As framework tailored to the needs of client groups is recommended as a good foundation for assisting this population group. Many substance-use clients may benefit from the involvement of other health professionals to support smoking cessation, where the drug and alcohol counsellor does not have the training or experience in nicotine dependence.

The NSW Ministry of Health has produced the *Nursing & Midwifery Clinical Guidelines – Identifying & Responding to Drug & Alcohol Issues* (58) that provide nurses and midwives with support and a benchmark for quality drug and alcohol use, assessment and care in daily practice.

The policy recommends that a client's substance use history (including tobacco) is recorded upon admission. In view of the relationship between tobacco use and other drug and alcohol issues this is strongly recommended to guide appropriate clinical treatments, especially for highly dependent smokers. The policy can be accessed from: [www.health.nsw.gov.au/policies/a-z/s.asp](http://www.health.nsw.gov.au/policies/a-z/s.asp)

### Did you know?

- Quitting smoking does not cause abstinent alcohol dependent people to relapse and may actually decrease the likelihood of relapse.
- Up to 80 per cent of people in addiction treatment are interested in quitting smoking.
- Among people who use alcohol and tobacco, approximately 75 per cent may want to quit both smoking and alcohol use (though the desire to quit alcohol use may be rated as higher).
- Inclusion of smoking as a target for intervention does not appear to reduce clients' commitment to broader addiction treatment and smoking rates may actually decrease as the motivation to quit smoking increases following successful alcohol treatment.

Source: *The U.S. National Institute on Alcohol Abuse and Alcoholism (NIAAA)* (55)



## People from culturally and linguistically diverse backgrounds

Some smokers from culturally and linguistically diverse backgrounds may face extra barriers to stopping smoking, including lack of knowledge of the harm caused by smoking and second-hand smoke, lack of accessible tobacco control measures, cultural norms around smoking and low literacy in English.

It is important that access to interpreters and culturally appropriate resources in a range of community languages is provided for clients from culturally and linguistically diverse backgrounds. A range of resources on tobacco smoking and quitting in different languages are available at: [www.mhcs.health.nsw.gov.au/publicationsandresources/pdf/copy\\_of\\_topics/smoking#c5=eng&b\\_start=0](http://www.mhcs.health.nsw.gov.au/publicationsandresources/pdf/copy_of_topics/smoking#c5=eng&b_start=0)

The Quitline 13 7848 (13QUIT) includes three language-specific telephone lines; Arabic, Chinese, and Vietnamese. This service is provided to cater to smokers who speak languages other than English and who wish to seek support from the Quitline.

|                                              |                     |
|----------------------------------------------|---------------------|
| <b>Arabic:</b>                               | <b>1300 7848 03</b> |
| <b>Chinese:<br/>(Cantonese and Mandarin)</b> | <b>1300 7848 36</b> |
| <b>Vietnamese:</b>                           | <b>1300 7848 65</b> |

The Quitline service is also available for smokers who speak other languages. For other languages the **Translating and Interpreting Service (TIS) on 13 14 50** provides an interpreter to support the provision of smoking cessation advice. The interpreter and a smoking cessation advisor will talk together with the smoker and provide advice, support and information to quit smoking. All conversation during the session is confidential.

## SECTION NINE

# Resources and information available for health professionals

### Policies, clinical tools and guidelines

- NSW Health Smoke-free Health Care Policy [www.health.nsw.gov.au/policies/a-z/s.asp](http://www.health.nsw.gov.au/policies/a-z/s.asp)
- Guidance for implementing smoke-free mental health facilities in NSW [www.health.nsw.gov.au/policies/a-z/s.asp](http://www.health.nsw.gov.au/policies/a-z/s.asp)
- Smoking cessation brief intervention at the chairside: role of public oral health/dental services – policy available from [www.health.nsw.gov.au/policies/pd/2009/PD2009\\_046.html](http://www.health.nsw.gov.au/policies/pd/2009/PD2009_046.html)
- Nicotine replacement therapy (NRT) – information on NRT in the Pharmaceutical Benefits Scheme (PBS) [www.pbs.gov.au/info/publication/factsheets/shared/Extension\\_of\\_the\\_listing\\_of\\_nicotine\\_patches](http://www.pbs.gov.au/info/publication/factsheets/shared/Extension_of_the_listing_of_nicotine_patches)
- Nursing & Midwifery Clinical Guidelines – Identifying and Responding to Drug & Alcohol Issues [www.health.nsw.gov.au/policies/gl/2008/pdf/GL2008\\_001.pdf](http://www.health.nsw.gov.au/policies/gl/2008/pdf/GL2008_001.pdf)
- Practical clinical tools for managing smoking in people with mental illness [www.health.nsw.gov.au/tobacco/Pages/smoking-and-mental-illness.aspx](http://www.health.nsw.gov.au/tobacco/Pages/smoking-and-mental-illness.aspx)
- ATRAC Framework: *A Strategic Framework for Aboriginal Tobacco Resistance and Control in NSW* (The Framework). The Framework will be available to download from the NSW Health website early in 2015 from: <http://www.health.nsw.gov.au/tobacco/Pages/default.aspx>

### Consumer resources

- Quitting smoking advice and resources from NSW Health <http://www.health.nsw.gov.au/tobacco/Pages/default.aspx>
- Fact sheets on smoking and other tobacco-related information from the Cancer Institute NSW [www.cancerinstitute.org.au](http://www.cancerinstitute.org.au)
- Resources for people of culturally and linguistically diverse backgrounds [www.mhcs.health.nsw.gov.au/publicationsandresources#c3=eng&b\\_start=0&c1=Tobacco](http://www.mhcs.health.nsw.gov.au/publicationsandresources#c3=eng&b_start=0&c1=Tobacco)

### Quitline resources

- Quitline referral form: [www.health.nsw.gov.au/pubs/2004/quitreferral.html](http://www.health.nsw.gov.au/pubs/2004/quitreferral.html)
- Quit Kits – download from: [www.icanquit.com.au/further-resources/online-quit-kit](http://www.icanquit.com.au/further-resources/online-quit-kit)
- Quitnow – National Tobacco Campaign [www.quitnow.gov.au/internet/quitnow/publishing.nsf/Content/useful-resources-lp](http://www.quitnow.gov.au/internet/quitnow/publishing.nsf/Content/useful-resources-lp)

## Aboriginal tobacco resources for consumers

- Resources from the Centre for Excellence in Indigenous Tobacco Control (CEITC)  
[www.ceitc.org.au/ceitc-publications-and-resources](http://www.ceitc.org.au/ceitc-publications-and-resources)
- No Smokes website – designed to appeal to young Aboriginal and Torres Strait Islander Australians:  
[www.nosmokes.com.au](http://www.nosmokes.com.au)
- Blow away the smokes DVD – colourful and informative documentary, where presenter Alec Doomadgee meets with smokers, ex-smokers and health professionals to talk about how to quit smoking cigarettes.  
<http://www.blowawaythesmokes.com.au/>
- Quit for 2 Quit for you app – Smartphone app that provides support and encouragement to help women give up smoking. Downloaded for free onto an iPhone or iPad from the [Apple iTunes online store](#) or for an android phone at [Google Play store](#)
- AH&MRC Aboriginal Tobacco Resistance Toolkit  
[www.ahmrc.org.au/index.php?option=com\\_docman&task=cat\\_view&gid=100&Itemid=45](http://www.ahmrc.org.au/index.php?option=com_docman&task=cat_view&gid=100&Itemid=45)

## Smoking cessation training

- Brain and Mind Research Institute – Nicotine addiction and smoking cessation training courses:  
<http://sydney.edu.au/bmri/courses/continuing-professional-development/smoking-cessation.php>
- Aboriginal Cultural Training Framework: Respecting the Difference  
[www.health.nsw.gov.au/policies/pd/2011/pdf/PD2011\\_069.pdf](http://www.health.nsw.gov.au/policies/pd/2011/pdf/PD2011_069.pdf)
- AH&MRC Aboriginal Health College Smoking Cessation Skills Set/ Tobacco Resistance and Control short course.  
[www.ahc.edu.au](http://www.ahc.edu.au)
- Health Education and Training Institute (HETI) website for on-line training courses in smoking cessation and motivational interviewing.  
[www.heti.nsw.gov.au/](http://www.heti.nsw.gov.au/)

## SECTION TEN

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## NRT Dosage Chart

### NRT initial dosing guidelines

| NRT product             | Client group (nicotine dependence)                                  | Strength                                | TGA approved dosage range                                    | Duration  |
|-------------------------|---------------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------|-----------|
| Patch                   | > 10 cigarettes per day and weight > 45 kg                          | 21 mg/24 hr patch or 25 mg/16 hr patch  | 1 patch per day                                              | > 8 weeks |
|                         | < 10 cigarettes per day or weight < 45 kg or cardiovascular disease | 14 mg/24 hr patch or 10 mg/16 hr patch. | 1 patch per day                                              | > 8 weeks |
| Gum                     | First cigarette > 30 mins after waking                              | 2 mg gum                                | 8-12 per day                                                 | > 8 weeks |
|                         | First cigarette < 30 mins after waking                              | 4 mg gum                                | 6-10 per day                                                 | > 8 weeks |
| Inhalator               | Assessed as nicotine dependent                                      | 15 mg cartridge                         | 3-6 cartridges per day                                       | > 8 weeks |
| Oral strip              | Assessed as nicotine dependent                                      | 2.5 mg strip                            | 1 strip every 1-2 hrs – use at least 9 per day               | > 8 weeks |
| Lozenge or mini lozenge | First cigarette > 30 mins after waking                              | 1.5 mg or 2 mg lozenge                  | 1 lozenge every 1-2 hrs                                      | > 8 weeks |
|                         | First cigarette < 30 mins after waking                              | 4 mg lozenge                            | 1 lozenge every 1-2 hrs                                      | > 8 weeks |
| Oral spray              |                                                                     | 1 mg                                    | 1-2 sprays every 30 minutes to 1 hr or up to 4 sprays per hr | > 8 weeks |

Source: Zwar et al. *Supporting smoking cessation: a guide for health professionals*. Melbourne: Royal Australian College of General Practitioners, 2011, updated July 2014.

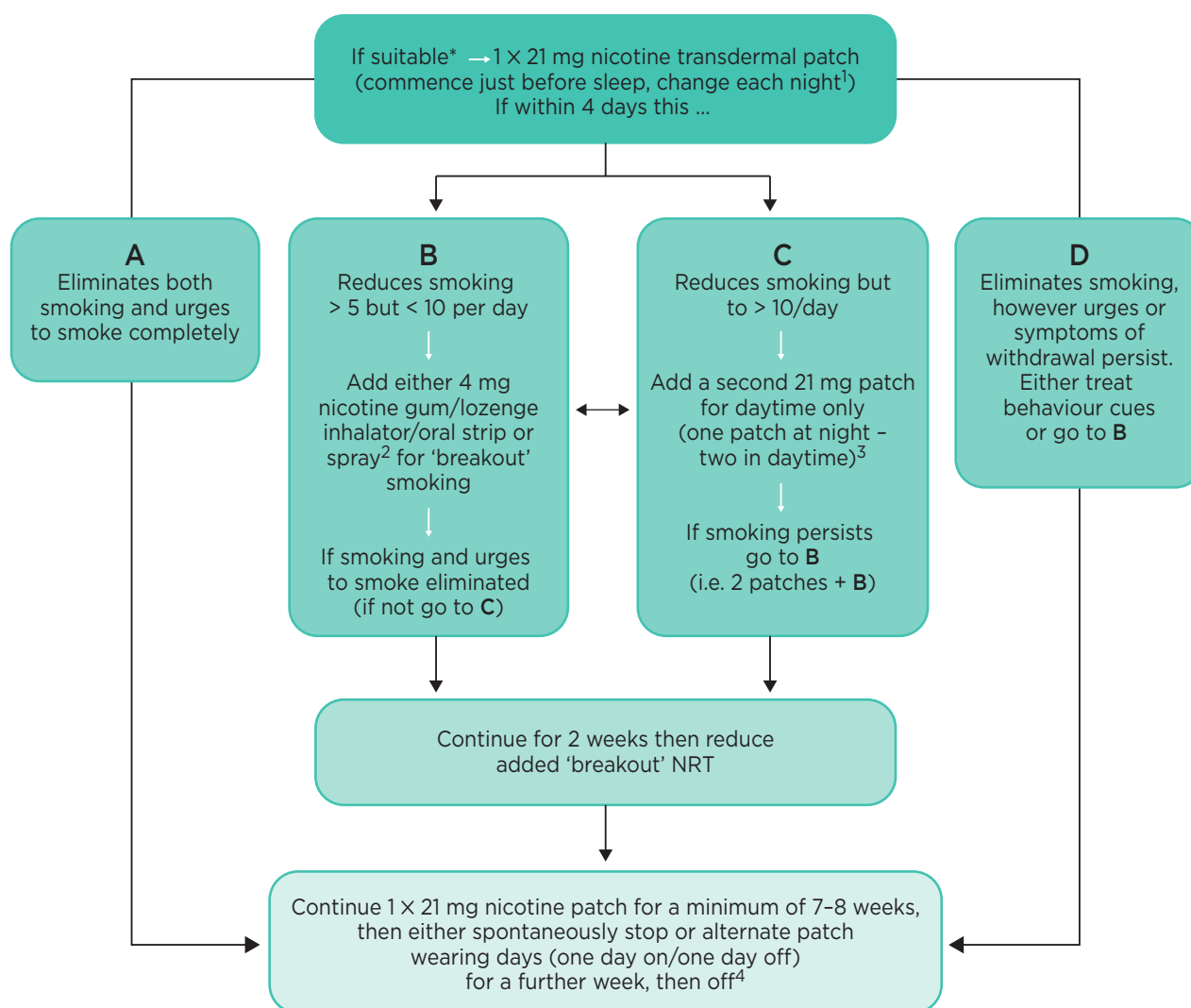
Note: This is a guide only. It is important to work closely with the client to determine an appropriate daily dosage of NRT that controls cravings and withdrawal symptoms. This may vary for a client during the week and as a client progresses through their quit attempt. Some clients will require more

than one patch or a combination of patch and oral NRT. CO monitoring is helpful to more accurately recommend an NRT strength and dosage.

Remember, it is always better for a client to use more NRT to control the urge to smoke than return to smoking.



## Bittoun Combination NRT Algorithm



Source: Adapted from Renee Bittoun, A Combination Nicotine Replacement Therapy Algorithm for Hard-to-Treat Smokers. *Journal of Smoking Cessation* 1(1):3-7, 2006.

**\*Precautions:**

- a) Pregnancy - All NRT OK but oral NRT preferred option. If patch is used, remove at night.
- b) Recent cardiovascular event (48 hours)

**Note:**

- 1. Applying patch last thing before sleep allows the slow rise of nicotine overnight. The likelihood of first cigarette of the day 'urge' is diminished.

- 2. Either 4 mg nicotine gum or lozenge depending on patient choice. Inhalator or oral strip/spray recommended over the others if patient needs faster reinforcement.
- 3. No evidence in our experience of toxicity. Consider reducing concentrations if nausea occurs.
- 4. There is no evidence for weaning (or reduction) of patch strengths.

## Availability of nicotine patches and other forms of pharmacotherapy through the PBS Scheme

### PBS listing for nicotine patches

The Pharmaceutical Benefits Scheme (PBS) listing for nicotine patches includes all eligible individuals (general and concessional clients) and allows for smokers to receive nicotine patches at a very low cost.

Supply of the nicotine patches on the PBS requires a prescription from a medical practitioner or authorised nurse practitioner. In NSW, a PBS script can only be authorised by doctors with rights of private practice who have a PBS provider number – these doctors may be working in the community (GP) or in a clinic in a public hospital. Hospital registrars and interns in NSW do not have PBS prescribing rights in public hospitals and cannot authorise PBS scripts. Public hospital patients who require a PBS script for a nicotine patch on discharge should be provided with a referral letter for their GP who has authority to write the script.

The nicotine patches are available as a 12 week supply in each year (one original script plus two repeats) with the following PBS access restrictions:

- This must be the sole PBS-subsidised therapy for quitting smoking for a patient who has indicated they are ready to cease smoking.
- The patient must have entered or be entering a comprehensive support and counselling program (during the consultation at which this prescription is written).
- The patient must not receive more than 12 weeks of PBS-subsidised nicotine replacement therapy per 12-month period.
- Details of the support and counselling program must be documented in the patient's medical records at the time treatment is initiated.

*Quitline* is an example of “a comprehensive support and counselling program”.

21 mg/24 hour and 25 mg/16 hour patches are available. The 5 mg, 10 mg and 15 mg patches are not available as PBS subsidised items except for veterans. 14 mg/24 hour and 7 mg/24 hour nicotine patches are also available but are rarely prescribed.

### PBS listing for bupropion and varenicline

If a person is unsuccessful in quitting using nicotine patches, they are able to access other smoking cessation therapies on the PBS (bupropion and varenicline) during that 12 month period. If person experiences side effects when using a PBS product they can be taken off that product and given a script for another PBS product without a waiting period.

Bupropion or varenicline may be prescribed as the first option of smoking cessation therapy for many who are planning to quit. Varenicline on PBS is now available (from 1<sup>st</sup> July 2014) for up to 24 weeks in a 12 month period.

### PBS availability of NRT to Aboriginal people

Aboriginal people can obtain two courses of PBS subsidised NRT (patches only) per year on a prescription provided by their doctor. Further information is available at: <http://www.pbs.gov.au/info/news/2008/12/nicotine-atsi>

### Closing the Gap (CTG) PBS co-payment measure

This is part of the Australian Government's Indigenous Chronic Disease Package. Access to reduced cost medications is provided for Aboriginal people who are living with or are at risk of chronic disease. Eligible persons must be registered at a rural or urban Indigenous health service, or a general practice that participates in the Indigenous Health Incentive (IHI) under the Practice Incentives Program (PIP).

Depending on the person's concessional status, when a CTG annotated prescription is dispensed at a pharmacy, the person pays a lower, or nil, co-payment for all PBS medicines. A concessional patient's co-payment reduces to nil and a general patient's co-payment reduces to that of a concessional patient. Some suppliers of PBS medicines impose a brand premium on some brands of medicine, which the person must pay. Brands that carry a manufacturer's surcharge are indicated by a 'B' on the PBS Schedule.

**Note:**

PBS listings change from time to time. To check current listings for NRT and other cessation pharmacotherapies visit the PBS website at:  
[www.pbs.gov.au](http://www.pbs.gov.au)

## Quitline and associated resources

### Quitline (13 7848 or 13 QUIT)

Quitline is a seven-day a week, telephone service that offers free assistance to smokers and former smokers wishing to speak to a trained health professional about changing their smoking behaviour, quitting or staying quit. The Quitline also offers support to concerned family members, friends of smokers and other professionals working with health clients or clients of social and community organisations. Callers can access this service by phoning 13 7848 or 13 QUIT from anywhere in Australia. The Quitline service is available for the cost of a local call, with higher costs for mobile phones. Callers are offered a free Quit Kit, which the Quitline Advisor will arrange to be posted to the caller within one working day. The Quit Kit is also able to be downloaded from the [icanquit](http://icanquit.com.au) website.

Quitline Advisors are available from Monday to Friday, 7am – 10.30pm and Saturday, Sunday and public holidays, 9am – 5pm. They can provide advice about quitting smoking, help to assess a smoker's level of nicotine dependence, provide strategies on preparing to quit and assist a person to prevent lapses and relapse and stay a non-smoker. Quitline Advisors can also provide information about products and services available to assist with quitting.

Quitline offers a free callback service to provide extra support and follow up to people during their quit attempt. This service is free of charge. Quitting smokers can choose to receive a series of calls tailored to meet their individual needs and to help them keep on track with their quit attempt.

Health professionals and those working in the social and community service sectors can also use this service for obtaining advice and information to support them in their contact with health clients who are smokers.

### Quitline service for Aboriginal people

The Aboriginal Quitline (13 7848 or 13 QUIT) is a service for the Aboriginal and Torres Strait Islander community. The NSW Aboriginal Quitline has an Indigenous team and this team has an Aboriginal Quitline Coordinator. All the NSW Quitline Advisors have received cultural sensitivity and awareness training in order to provide a culturally accessible and appropriate service for Aboriginal and Torres Strait Islander people. Quitline Advisors are also available to assist Aboriginal Health Workers to provide a brief smoking cessation intervention to their clients. The Aboriginal Quitline provides a tailored, personal service and can provide training and resources for the NSW community and its workers.

### Quitline service for culturally and linguistically diverse communities

Multilingual Quitlines provide access to professional bilingual Quitline Advisors: Arabic (1300 7848 03), Chinese (1300 7848 36) and Vietnamese (1300 7848 65). Messages may be left in Korean on 1300 7848 23. An Interpreter Service is available for Korean and other languages.

### Quitline fax referral

Smokers seeking assistance with quitting can sign a Fax form during a consultation with a health professional or social and community service organisation worker which is then faxed to the Quitline. A Quitline Advisor will call the person at the designated time to provide smoking cessation support. The Quitline Fax referral service is a useful resource for hospitals' discharge processes as it enables continued support for health clients who have been inpatients and have abstained from smoking during their hospital stay. For a copy of the fax referral form or the Order Form to obtain multiple copies, visit [www.health.nsw.gov.au/tobacco/Pages/quitline-referral-forms.aspx](http://www.health.nsw.gov.au/tobacco/Pages/quitline-referral-forms.aspx)

All health professionals and social and community service workers can obtain Fax referral pads and Quitline pamphlets for clients from the NSW Health website: [www.health.nsw.gov.au/quittingsmoking/Pages/default.aspx](http://www.health.nsw.gov.au/quittingsmoking/Pages/default.aspx)

### **iCanQuit website**

The [www.iCanQuit.com.au](http://www.iCanQuit.com.au) website is a resource to assist people to quit smoking. It is designed to motivate people to stop smoking by providing them with the information and tools they need to make a quit attempt. It is interactive in design and allows smokers to share their stories about previous, current or planned quit attempts. It provides helpful hints on how to quit as well as a goal tracker and savings calculator so smokers can see the tangible results of quitting.

### **My QuitBuddy application**

My QuitBuddy is one of the resources available at the [www.quitnow.gov.au](http://www.quitnow.gov.au) website. This is a personalised, interactive smart phone application with quit tips, daily motivational messages and countdown to quitting reminders. The user can record their quit goals in pictures, words or audio messages. There is a 'panic button' for when cravings arise and this provides the user with a range of distractions. The application is available at <http://www.quitnow.gov.au/internet/quitnow/publishing.nsf/Content/quit-buddy>

### **Quit for You – Quit for Two application**

Quit for You – Quit for Two is another resource available at the following website: [www.quitnow.gov.au](http://www.quitnow.gov.au)

This application is designed to provide support and encouragement to help those who are pregnant or planning to be pregnant to quit and stay quit. The application is available at [www.quitnow.gov.au/internet/quitnow/publishing.nsf/Content/quit-you-quit-two](http://www.quitnow.gov.au/internet/quitnow/publishing.nsf/Content/quit-you-quit-two)

# Motivational interviewing

## What is motivational interviewing?

Motivational interviewing aims to help the client explore the pros and cons of their continued smoking and to encourage them to talk about their reasons for concern and arguments for change.

Motivational interviewing is based on respect for the person and their feelings about their smoking. Motivational interviewing uses the 'Stages of change' model to assess how a client feels about his/her smoking and then helps that person to decide whether he/she want to quit smoking.

### Principles of Motivational Interviewing

#### 1. Express Empathy

- *Acceptance facilitates change.*
- *Skilful reflection is fundamental.*
- *Ambivalence is viewed as a normal and important part of the change process.*

#### 2. Develop Discrepancy

- *A conflict between present behaviour and important personal goals or beliefs can motivate change.*
- *Highlighting the potential contradictions that can increase ambivalence.*
- *Encourage the person to present arguments for change.*

#### 3. Avoid Argument

- *Arguments are counterproductive.*
- *Defending breeds defensiveness.*
- *Resistance is a signal to change strategies.*
- *Labelling is unnecessary for change.*

#### 4. Roll with Resistance

- *Momentum can be used to good advantage.*
- *Perceptions can be shifted.*
- *New perspectives are invited but not imposed.*

#### 5. Support Self-efficacy

- *Belief in the possibility of change is an important motivator.*
- *The person is responsible for choosing and carrying out personal change.*

### Five basic strategies:

- **Ask open-ended questions.** Get the person to explain in their own words how they feel or think about their smoking. Open-ended questions don't have a 'yes' or 'no' answer. For example, "How do you feel about your smoking currently?"
- **Use reflective (active) listening.** This means repeating back in your own words what the person is saying to make sure that you understand them correctly. An example is "So you're saying that you think gum might be better for you than patches because last time the patches didn't work?"
- **Encourage doubts.** Help the person to see that it doesn't make sense for them to do something that they feel is harmful.
- **Be personal.** Provide feedback for the person's particular situation.
- **Elicit change talk.** Get the person to tell you why they should change.

If you do not feel confident doing interventions in your daily work, first practice in situations where you feel comfortable. Practice will build confidence and skills.

A health worker can assist a client explore their feelings about their smoking, by asking them to 'weigh up' the *good things* and the *not-so-good things* about smoking. Asking the person to think about smoking in these terms allows them to acknowledge that for them, there are some 'good' things about their smoking. Usually health workers try to convince smokers that smoking is bad for them by listing the negative effects of smoking. This often leads to an increase in the smoker's resistance to change and the response of "yes, but...." and then a list of positive aspects of smoking. After exploring the 'good' things about smoking, they are usually far more willing to explore the 'not-so-good' things in a more real and honest way.

Below is an example of what the list might contain. Health workers worry that the client will list more things under 'good' than 'not so good', which sometimes is the case. However this can be dealt with using 'decisional balancing' or by creating an expanded list.

| Good things about smoking                                                                                                                                                                                                                                                                                                                                                            | Not so good things about smoking                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>■ makes me feel relaxed</li> <li>■ good when I'm stressed</li> <li>■ all my friends smoke</li> <li>■ something to do when I'm bored</li> <li>■ I like smoking when I have a few drinks</li> <li>■ gets me out of the office</li> <li>■ good after a meal</li> <li>■ makes me look good</li> <li>■ keeps me awake, gives me a boost</li> </ul> | <ul style="list-style-type: none"> <li>■ I cough every morning</li> <li>■ it costs a lot</li> <li>■ I'm out of breath when I walk uphill</li> <li>■ my family always tell me I smell of smoke</li> <li>■ my kids are worried about my health</li> <li>■ I don't like hanging out for a smoke</li> <li>■ I hate it when I run out of smokes</li> <li>■ it's bad for my diabetes</li> <li>■ it raises my blood pressure</li> </ul> |

## Decisional Balancing

You can ask your client to give each item on the list a number from 1 to 10, with 1 being 'least important' and 10 being 'most important', then add them up. This may be enough to clarify their position, by giving more weight to some issues on the lists. Particularly when there are perhaps 6-10 items under 'good' and only 2-3 under 'not so good', it may surprise them that the number tallied under 'not so good' is larger than the number tallied under 'good'.

Don't worry if it is actually the reverse and there is more weight given to 'good' than 'not so good'. Sometimes we have to accept that the client is just not ready to change. It is worth asking them to do the list again in a month or so and see if there is any difference, as they will now have a heightened awareness of the 'not so good' things about smoking and this may be enough to increase their ambivalence about it. Increased ambivalence means that they are often more open to change.

## Expanded List

Sometimes a client is so confused or ambivalent that it is helpful to look at the issues in an expanded list, which allows that person to see that there are subtle differences between, for example, the 'good things' about smoking and the 'not so good things' about quitting.

| Good things                                                                                                                                                                                                                                                                                            | Not so good things                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Keep smoking</b>                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>■ makes me feel relaxed</li> <li>■ good when I'm stressed</li> <li>■ all my friends smoke</li> <li>■ something to do when I'm bored</li> <li>■ I like smoking when I have a few drinks</li> <li>■ gets me out of the office</li> </ul>                          | <ul style="list-style-type: none"> <li>■ I cough every morning</li> <li>■ it costs a lot</li> <li>■ I'm out of breath when I walk uphill</li> <li>■ my family always tell me I smell of smoke</li> <li>■ my kids are worried about my health</li> </ul>                        |
| <b>Quit smoking</b>                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>■ I'll feel healthier</li> <li>■ I won't feel like an outcast in some social situations</li> <li>■ I'll be able to go to the cinema with my kids and not hang out for a smoke</li> <li>■ I'll be able to save some money or have more money to spend</li> </ul> | <ul style="list-style-type: none"> <li>■ I hate the cravings</li> <li>■ My friends try and get me smoking again</li> <li>■ I can't see my smoking friends for a while and most of my friends smoke</li> <li>■ Can't go to the pub for a while, I always smoke there</li> </ul> |

Try to highlight the subtle differences between, for example, the 'good things about quitting' and the 'not so good things' about smoking. For example, the point about feeling like an outcast in some social situations didn't even come up in their list of 'not so good things about smoking', yet it did in the 'good things about quitting'. Sometimes the reframing helps people develop discrepancy awareness.

## Scaling questions

Another strategy is to use 'scaling questions' to measure importance and confidence in order to establish a person's readiness for change

**Ask:**

***"On a scale of 1-10, how important is it for you to make a change?"***



If the client picks a low number you can always ask "Why didn't you pick an even lower number?" In the answer the client will hear themselves say something like "Well, everyone knows smoking isn't good for you" - the difference is that this has been elicited from the client, rather than the worker having to convince the client that smoking isn't good for them.

***"If you were to make a change, on a scale of 1-10, how confident would you be to make a change?"***



If the client rates their confidence as "2", the worker can ask "Why did you pick 2 and not 1, you could have picked 1?" In the answer the client gives to the worker is the "change talk" you want to elicit from them. The client may say something like "Well I have quit for 2 weeks a couple of times, so I have been able to quit for a little while. I know a few things about quitting". This is unlikely to generate any arguments between the worker and the client (leading to resistance) as it is moving at the client's own pace.

We can also ask the client what it would take to have them pick a higher number. They will either say something concrete such as, "If I could get free NRT" or "if I could see a quit counsellor", which you may be able to assist with. But more often people will say "I don't know", at which point you can respectfully ask them would they be interested in you explaining some of the options and strategies for quitting.

Remember, change is a process, not a 'one-off' event and it is important for you to honour the client's own pace and allow them time and space to reflect on any discussions you have with them about change.

Adapted by Tracey Greenberg, NSW Smoking Cessation Trainer from material prepared by Alison Bell, Motivational Interviewing Trainer



## Guidelines for using the Smokerlyzer (Carbon Monoxide Monitor)

### General information

- Carbon Monoxide (CO) monitors are used for a range of reasons in tobacco cessation research and treatment. In research they are used to validate self-reported smoking. In treatment they are used to assess an estimate of dependency, motivate patients to quit and as a harm minimisation tool. Carbon Monoxide monitors can be used to titrate cessation pharmacotherapies and to determine efficacy of pharmacotherapies.
- CO monitors give an indication of how strongly a person is inhaling cigarette smoke and thus provide an estimate of their level of dependency and the degree of harm from smoking. The deeper the inhalation, the more toxic chemicals absorbed, the higher the nicotine and CO levels will be and the increased risk of harm. CO monitors cannot discriminate between tobacco smoke and other sources of inhaled smoke, eg cannabis smoke. It is therefore important to assess cannabis use if using a CO monitor.
- CO monitors can be used as a motivational aid in treatment, because a reduction in cigarette smoking will usually result in reduced CO levels. This is often the only tangible evidence of the positive effects of reduced smoking.
- The CO monitor measures the level of carbon monoxide (ppm CO) in breath, which is an indirect measure of blood carboxyhaemoglobin (%COHb). In a typical puff of a cigarette there is about 5 per cent by volume CO.
- CO levels also act as an indicator of the possible level of some 7000 toxic substances in cigarette smoke, some 70 of which cause cancer.
- CO has a half-life of around 5-6 hours. It usually takes 48 hours for CO levels in breath to reduce to that of a non-smoker.
- CO successfully competes with oxygen in the blood. Smokers have between 5-20 per cent less oxygen in their blood than non-smokers. To compensate, the body produces more red blood cells as a way to increase oxygen levels. Having too many red blood cells increases the risk of clots, thus increasing the risk of stroke and heart attack.

### CO readings and level of dependence:

- 0-6ppm **non-smoker**
- 11-20ppm **light smoker**
- 21-100ppm **heavy smoker**
- Reducing the number of cigarettes smoked does not necessarily reduce CO levels, as most people compensate (draw back harder) on the fewer cigarettes they smoke, unless they use NRT.
- Patients should hold their breath briefly before blowing into the CO monitor and should exhale completely to obtain the best correlation with COHb. Patients should blow slowly into the monitor to obtain the most accurate reading.

### Guidelines for monitoring CO in the withdrawal unit

- The CO monitor is best used as a motivational aid and feedback should be provided to patients, on admission, about the purpose of CO monitoring and the risk of harm caused by CO.
- Assess each patient's CO level at the admission interview and for the first three days after admission.
- The CO monitor should NOT be used in a punitive way and/or to validate whether a patient has smoked, as this builds resistance to the use of the monitor and reduces its value as a motivational aid in smoking cessation.
- CO levels should be recorded on a Nicotine Withdrawal and NRT Monitoring form during admission.
- Individual feedback should be provided to patients on their current CO level and any reductions in CO should be acknowledged and highlighted as a positive health gain.

## Script for introducing the CO monitor to patients

This device measures the level of carbon monoxide in your breath. Carbon monoxide (CO) is produced through smoking and reduces the level of oxygen in your blood. Smokers have between 5-20 per cent less oxygen in their blood compared to non-smokers. Because you have less oxygen, your body produces more red blood cells to increase oxygen supply. When you have too many red blood cells, they can form clots and this is a cause of stroke and heart attack. It's also the reason why people are advised to stop smoking before an operation.

This device will provide a reading of your current carbon monoxide level, which is an indirect measure of your level of nicotine dependence and depth of inhalation on cigarettes. There are 7000 chemicals in every cigarette, the harder you inhale, the more chemicals and nicotine you absorb and the higher your CO level. Puffing lighter reduces the harm, but there is no safe level of smoking.

The good thing about carbon monoxide is you expel it from your system quickly. Within 1-2 days of not smoking, your carbon monoxide level will reduce to that of a non-smoker. Within one week, your skin will look more vibrant, and your hands and feet will warm up, with increased oxygen and better circulation.

All you need to do is take a deep breath in and hold it until the monitor beeps, then blow slowly into the machine for as long as you can, or until the machine beeps again. The machine will display a reading and I'll use this chart to explain your reading.

## After the patient has blown into the device

Your reading is XXppm. This is where you are on the chart. This reading indicates that you are drawing back (hard? lightly? average?) for the number of cigarettes you have smoked so far today. The higher the reading the more nicotine replacement therapy you will require.

Two people can smoke the same number of cigarettes, but have very different CO readings and therefore require different levels of NRT. For example, if two people smoked 4 cigarettes each and one recorded a reading of 11ppm and the other recorded a reading of 28ppm, the one with the higher reading will require a higher dose of NRT, because they have higher nicotine levels. If you stop smoking, or use more NRT, your CO level will reduce significantly.

*Source: Louise Ross, Drug Health Services, Sydney Local Health District*

APPENDIX SEVEN

## Sample checklist for assessment and provision of NRT to clients who smoke

| Action                                                                                                                                                                                     | Notes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Assess client for nicotine dependence and inability to quit                                                                                                                             | Nicotine dependent is craving or having first cigarette within 30 minutes of waking, smoking > 10 cigarettes per day or a history of withdrawal symptoms in previous quit attempts.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 2. Check for contraindications                                                                                                                                                             | Contraindications include: <ul style="list-style-type: none"> <li>■ 12 years and under</li> <li>■ Hypersensitivity to nicotine or any other component of NRT</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 3. Check for precautions                                                                                                                                                                   | NRT should be used with caution for clients in hospital for acute cardiovascular events, but if the alternative is smoking, NRT can be used under medical supervision.<br>Conditions where some forms of NRT should be avoided: <ul style="list-style-type: none"> <li>■ Phenylketonuria – avoid lozenges</li> <li>■ Dentures – avoid using gum</li> <li>■ Oral, oesophageal, pharyngeal or gastric inflammation – may be worsened by gum, lozenge and inhalator</li> <li>■ Asthma and chronic throat conditions – avoid inhalator</li> <li>■ Generalised skin disease – avoid patch</li> </ul>                                                                              |
| 4. Explain what NRT is and what it does                                                                                                                                                    | NRT helps to control nicotine withdrawal symptoms and cravings. NRT products contain nicotine but none of the other harmful chemicals that are present in a cigarette.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 5. Ask if the client wants to try NRT in addition to behavioural support                                                                                                                   | If yes – continue with checklist<br>If no – document reasons why and provide ongoing behavioural support.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 6. Explain the different types of NRT available and potential minor side effects from taking NRT                                                                                           | Discuss with the client the different types of NRT available (lozenge, gum, inhalator, spray, oral strip and patch) and how they work.<br>No serious side effects with short or long term use of NRT. Some people experience minor side effects with some NRT products as below: <ul style="list-style-type: none"> <li>■ Nausea, headache, dizziness</li> <li>■ Oral NRT <ul style="list-style-type: none"> <li>- hiccups, coughing, irritation of mouth or throat, indigestion, nausea, headache</li> </ul> </li> <li>■ Nicotine patches <ul style="list-style-type: none"> <li>- vivid dreams (24 hour patch), insomnia, application site reaction</li> </ul> </li> </ul> |
| 7. Ask about caffeine intake                                                                                                                                                               | Recommend that client halves their usual caffeine intake (coffee, cola and energy drinks) when they quit smoking due to increased sensitivity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 8. Ask client about medications they are taking or check medical record and refer to a medical officer /GP to adjust dosage if client is taking any medications that interact with smoking | Refer to the table 'Medications that interact with smoking on page 27 of this resource.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 9. Commence the client on an NRT product (if in hospital) or provide a sample to try if in an outpatient setting.                                                                          | Staff not confident or qualified to assess and recommend a type of NRT can refer the client to a cessation specialist, medical officer, GP or Quitline to provide this advice.<br>Monitor client's acceptance of the NRT product and its effectiveness while in hospital – make adjustments to dosage or change product to control nicotine withdrawal symptoms.                                                                                                                                                                                                                                                                                                             |
| 10. Provide at least three days' supply of NRT product used in hospital at discharge <i>and if appropriate</i> , a referral letter to the GP to obtain a PBS script for the patch.         | Note: A referral letter to the GP is required because in NSW, a PBS script can only be authorised by doctors with rights of private practice who have a PBS provider number. Registrars and interns do not have PBS prescribing rights in public hospitals and cannot authorise PBS scripts.                                                                                                                                                                                                                                                                                                                                                                                 |

# System Assessment Questionnaire

## Smoking cessation brief intervention: Identifying Gaps and Taking Action

### 1. Level of commitment

Is there support from senior management to ensure brief interventions are part of routine clinical practice?  Yes  No

Is there support from team members / clinicians to ensure brief interventions are part of routine clinical practice? How would you rate the team's commitment?

Not interested  Ambivalent  Interested  Very Keen

### 2. Incentives and barriers

What are the main incentives for the team to ensure brief intervention is a part of routine clinical practice?

- Meets best practice requirements
- Improves patient care
- Reduces the potential costs of treating smoking related disease
- Improves patient's health
- Improves patient's economic position (more money to spend on other things)
- Reduces long term health risks
- Complies with organisations policy
- Meets patients expectations that health risks will be assessed and managed

Other (if any)

Are any of the following barriers to your service providing stop smoking support?

- Lack of time  Yes  No
- Lack of space  Yes  No
- Lack of skills/confidence in smoking cessation  Yes  No
- Lack of patient interest in quitting  Yes  No

Other concerns about staff/patient relationship:

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### 3. Policy and Procedures

Does the team have written policies and procedures that ensure smoking is routinely addressed?  Yes  No

Have the policies and procedures been communicated to all staff?  Yes  No

Have the policies and procedures been updated?  Yes  No

When?

Does the policies/procedure reflect the guidelines set out in "Managing nicotine dependence - a guide for NSW Health staff?  Yes  No

Are there reminders prompts in the patient assessment process to ask about smoking?  Yes  No

Are all smokers given brief advice and encouraged to quit?  Yes  No

If yes, in what stages (e.g. initial attendance or in ward)

Are patients who are advised to stop referred to the Quitline or local smoking cessation program?  Yes  No

#### 4. Teamwork

- Are all team members committed to helping smokers to quit?  Yes  No
- Are tasks for helping smokers shared out amongst the team?  Yes  No
- Are there some staff members who have completed training in smoking cessation who can offer advice and support?  Yes  No

#### 5. Training

- Have all staff received brief intervention training?  Yes  No
- Due to the importance of all team members being involved in helping smokers quit, will all staff be able to attend training or refresher training on smoking cessation?  Yes  No

#### 6. Environment

- Is the NSW Health Smoke-free Health Care policy actively adhered to?  Yes  No
- Does the service have smoke-free signage displayed appropriately?  Yes  No
- Are posters on display in the reception area and consultation rooms promoting smoking cessation and the Quitline?  Yes  No
- Are posters changed at least every 3-4 months?  Yes  No

#### 7. Resources

- Does the service have self-help stop smoking leaflets?  Yes  No
- Does the service have culturally appropriate resources?  Yes  No
- Does the service have resources for pregnant smokers?  Yes  No
- Are the resources organised so that staff can easily find appropriate resources to meet the individual needs of clients?  Yes  No

#### 8. Therapies

- Is nicotine replacement therapy (NRT) and other pharmacotherapy recommended to clients planning to stop smoking?  Yes  No
- Is there information available about NRT and other cessation pharmacotherapies?  Yes  No

#### 9. Referral

- Does the service have information about the Quitline and local cessation services for clients to take away with them?  Yes  No
- If yes is this information on display?  Yes  No
- Is the team aware of the success rates of the service?  Yes  No

#### 10. Feedback

- Is client satisfaction with the stop smoking support evaluated?  Yes  No
- If yes - how?
- Is patient feedback used to improve your programme?  Yes  No
- If yes - how?

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- Is feedback provided to the team about client satisfaction?  Yes  No
- If yes - how?
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