

The ABC Pathway:

Key messages for health workers and services, 2021

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Purpose

The purpose of this document is to communicate key messages about the 'ABC' pathway for health workers to refer to when they are helping people stop smoking.

The ABC pathway is a model for all health workers in the health system to refer to. The aim is to encourage more people to make more stop-smoking attempts, supported by evidence-based treatments, more often.

- **A** is for **Asking** about and documenting every person's smoking status.
- **B** is for giving **Brief advice** to stop smoking to every person who smokes.
- **C** is for strongly encouraging **Cessation support** (a combination of behavioural support and smoking cessation medicine works best) for every person who smokes and offering those people help to access it.

ABC provides a systematic approach to supporting people who smoke. All health workers should be competent in delivering the ABC pathway.

Here, we provide general messages for all health workers to make themselves familiar with. We've also included messages for health workers in particular roles or services – maternity, youth health, mental health, emergency department, surgical, cancer and oral health.

Each set of key messages is supported by a summary of current technical information from the literature.

Key messages for all health workers in all health settings

Smoking kills people prematurely

- Around 4,500 deaths each year are related to tobacco use and exposure. One-third of these deaths occur in middle age, not just in old age.¹

Smoking causes other health problems

- When people who smoke have surgery, they are more likely than people who don't smoke to have complications and problems with wound healing.²
- Smoking during pregnancy increases the risk to mother and baby during and after pregnancy.³

Fewer New Zealanders are smoking

- Since 2006, daily smoking prevalence has dropped from 22 percent to 12 percent.⁴
- Smoking is no longer accepted as the norm in many families, community groups and settings.
- Smoking rates have decreased from 42 percent to 29 percent among Māori and 30 percent to 18 percent among Pacific peoples.⁴
- The government has committed to providing services and changing policies to continue to reduce smoking further, to below 5 percent across all groups by 2025.

Most people who smoke want to stop

- Most people who smoke would like to stop⁵ and wish they had never started.
- They expect to be asked about smoking by their health providers.
- They appreciate any help they get from their health providers.
- It is hard to stop smoking. People mostly smoke because they are addicted to cigarettes. A 40-year-old smoker who started smoking at the age of 18 years is likely to have already made 22 unsuccessful quit attempts.⁶

Stop-smoking treatment works and is highly cost effective

- Stop-smoking treatment is a life-saving and cost-effective intervention.⁷
- 'Cold turkey' stop-smoking attempts have a very low chance of success: only 3 to 5 percent of smokers who try to stop without support succeed in not smoking for a year.
- Brief advice from health workers to stop smoking is effective.⁸
- Encourage people to keep trying, even when they have tried to stop many times. Do not give up on offering support for stopping smoking at every opportunity to people who smoke.
- A combination of behavioural support and pharmacotherapy increases quit rates at least fourfold compared with no treatment.⁹
- Quitline and local stop-smoking services provide behavioural support, nicotine replacement therapy (NRT) and advice on other stop-smoking medicines.
- Effective medications (NRT, varenicline, bupropion and nortriptyline)¹⁰⁻¹² are available. Their cost is subsidised to make them affordable.
- Vaping products (for example, e-cigarettes) can help people stop smoking when used daily and combined with behavioural support,¹³ especially those containing nicotine. However, they are not approved stop-smoking medications.

Smoking cessation is important for improving health equity

- Māori and Pacific peoples experience inequities in access to and quality of health services and inequities in the social determinants of health that contribute to higher rates of smoking.^{14, 15}
- Health workers should understand that systematic and structural factors (colonisation, the Crown's failure to meet obligations under Te Tiriti o Waitangi, institutional racism, limited access to health services and adequate quality of care, and the wider determinants of health on which Māori are disadvantaged) have all contributed to the high prevalence of smoking in Māori compared with non-Māori.¹⁴ Many of these factors also contribute to relatively high smoking rates among Pacific peoples.
- Services and organisations must identify and address barriers to equitable care for Māori and Pacific peoples to address health disparities between groups and improve health equity.
- Health workers who provide support to Māori and Pacific smokers (or other priority population groups) should seek training to ensure they perform this role in both a technically and a culturally safe manner.

Key messages for maternity services providers

- Smoking in pregnancy increases the risks for both women and babies. Smoking in pregnancy increases the risks of:
 - ectopic pregnancy
 - spontaneous abortion
 - placenta insufficiency
 - low birthweight babies
 - preterm delivery
 - sudden unexplained death in infancy (SUDI)
 - childhood respiratory disease
 - attention deficit disorder.³
- Stopping smoking completely, not just cutting down, is important to reduce the risks to the health of pregnant women and their babies. Even 'light or occasional' smoking poses health risks. Women should plan to be completely smokefree as quickly as possible when they become pregnant – in the first trimester is best, but it is never too late.
- Women who continue to smoke during their pregnancies are generally heavily dependent on nicotine and find it very difficult to stop. Continue to offer them support to stop smoking at every opportunity.
- Offer women who smoke multi-session, behavioural, stop-smoking interventions without delay, ideally provided by a dedicated stop-smoking service.
- Suggest the women try NRT – it is much safer than continuing to smoke.¹⁶ Short-acting NRT (like gum or lozenges) is preferred, but pregnant women can use nicotine patches so long as they do not wear the patches overnight.
- Vaping products may be considered for pregnant women who have been unable to quit smoking through other methods, but only after the women have been informed of and have weighed up the risks and benefits.
- Find the right balance of advice – non-judgmental, persuasive and supportive.
- Women who are attempting to stop smoking should be supported throughout their pregnancies and into the post-partum period when relapse is common.¹⁷

Technical information

Tobacco smoke contains more than 5,000 compounds, including carbon monoxide, nicotine and at least 250 other chemicals that are known to be harmful.¹⁸ Tobacco smoke adversely affects placental function, reduces blood flow to the uterus and can reduce oxygen supply to the fetus, all of which may result in pregnancy complications, adverse birth outcomes and low birth weight, which is associated with long-term health problems (including increased risk for SUDI).¹⁹

The best outcomes in pregnancy are achieved with complete cessation (not reduction). Studies have found no difference in growth and adverse birth outcomes in babies born to mothers who reduced their cigarette consumption compared with those who did not change their consumption habits.^{20, 21} In contrast, babies born to mothers who had quit smoking or had never smoked had better outcomes.

Although nicotine itself carries some risk to the fetus, it is regarded as safer when delivered to the mother through NRT or e-cigarettes compared with through cigarette smoking.²² Levels of exposure to nicotine from NRT are low relative to cigarette smoking.¹⁶ Pregnant women should be advised of the potential risks and benefits of using NRT, and it should always be offered in combination with behavioural support.²³

Key messages for youth health services providers

- Interventions in youth health services, such as education and brief counselling, can help prevent tobacco being used by children and adolescents.²⁴
- Youth health services should also be aware of the risks of second-hand smoke to children and young people exposed to smoking in their homes and should advise whānau to stop smoking and offer smoking cessation support.
- Youth health services can offer stop-smoking interventions that incorporate components known to be effective (such as those identified in the previous sections) to young people who smoke.
- NRT may be considered for use by young people who want help to stop smoking, even though there is limited evidence of benefit.²⁵

Technical information

In 2019/20, the prevalence of smoking in people between the ages of 15 and 24 years was 12.4 percent, down from 23.4 percent in 2006.⁴ In the 15- to 17-year-old age group, current smoking was very low (3.3 percent), down from 21.3 percent in 2006. However, smoking among young people varies considerably by gender and ethnicity (for example, there are higher rates of smoking in Māori youth compared with Pākehā youth).

In a United Kingdom study, children of mothers who smoked during pregnancy were found to be more likely to be smokers in their early teens than children of mothers who never smoked.²⁶ Likewise, children exposed to smoking in the home were found to be more likely to take up smoking in their early teens than those who were never exposed to smoking in the home.

Second-hand smoke exposure increases the risk of premature death, illness and other adverse health effects.²⁷ Health problems in children associated with second-hand smoke exposure include asthma and respiratory infections, ear infections and SUDI.

Key messages for mental health services providers

- Most people with mental illness who smoke want to stop smoking.
- Stopping smoking can improve some aspects of mental health, and many people with mental illness also suffer physical illnesses related to their smoking.
- Mental health service users who smoke typically need more intensive support to stop than those without mental illness.
- Stopping smoking can alter the metabolism of some mental health medications (for example, selective serotonin reuptake inhibitors (SSRIs) and some antipsychotic medications). The dose of mental health medication may need to be adjusted downward, with medical advice, if a person stops smoking completely.

Technical information

Smoking among people with mental illness is higher than in the general population.²⁸ For example, the odds of being a smoker for those people diagnosed with schizophrenia is approximately six times greater than for those people without schizophrenia.²⁹ People with mental illness also tend to be more dependent smokers^{12, 14, 15} and have higher cigarette consumption.^{12, 17} This has implications for their smoking-cessation treatment (for example, they may need higher doses of NRT and require a longer duration of treatment).

Contrary to popular understanding, stopping smoking, compared with continuing to smoke, is associated with improved mood and reduced depression, anxiety and stress.¹³

NRT use should be considered for those residing in smokefree environments, even if they currently do not wish to stop smoking. Recent data show that NRT can reduce agitated behaviour in people with mental health illness.¹⁸

Polycyclic aromatic hydrocarbons present in tobacco smoke speed up the activity of the liver enzyme cytochrome P450 (CYP1A1, CYP1A2)¹⁹ that metabolises some medications (for example, clozapine, olanzapine and chlorpromazine). When people stop smoking, CYP1A2 activity rapidly returns to normal, and the metabolism of the medications slows. Thus, when people stop smoking, they may need the dose of medication reviewed by a medical professional and possibly reduced.³⁰

Smoking also increases the metabolism of caffeine. Therefore, people may consider reducing the amount of caffeinated drinks (such as coffee and some soft drinks, like colas) when they stop smoking.

People using insulin to control diabetes may find that they need less insulin to maintain their blood sugar levels when they stop smoking. Therefore, they may need to check their blood sugar levels more often for a week or two after quitting smoking.

Key messages for emergency department providers

- Smoking prevalence is higher among people who attend an emergency department (ED) than in the general population.
- Smoking is often directly relevant to the presenting complaint and may also be relevant to recovery (for example, wound healing is impaired in smokers).
- Many people who present to an ED are interested in quitting smoking.
- Brief interventions are effective. For example, for every 40 smokers advised to quit by their doctor, one will go on to become an ex-smoker.³¹
- Intensive stop-smoking support does not have to be delivered in the ED. Still, patients can be offered a prescription for NRT or referred to a stop-smoking treatment provider (for example, Quitline or local stop-smoking services) or to their general practitioner for follow-up.
- Many people who smoke may not be registered with a general practice, so advice from ED staff may be the only support they receive.

Technical information

In a New Zealand study, smoking prevalence in ED patients was higher than in the general population (33 percent, compared with 20 percent in the general population).³² Furthermore, 26 percent of the smokers presenting to an ED were highly dependent on cigarettes and would benefit most from stop-smoking treatment. Most of the smokers accessing the ED (75 percent) wanted to quit and 57 percent were ready to do this in the next month. Fourteen percent of smokers were not registered with a general practice.³² Therefore, stop-smoking advice from ED staff may be one of only a few opportunities for health provider intervention.³²

Key messages for surgical service providers

- Smokers are at particular risk of post-operative complications and should be strongly encouraged and assisted in stopping smoking before surgery to help with wound healing and recovery.
- Surgical staff should strongly advise all patients who smoke to quit and recommend effective approaches. These approaches may include making a referral to a local stop-smoking service or Quitline or writing a letter to the patient's general practitioner asking them to instigate stop-smoking treatment.
- NRT can be used to manage nicotine withdrawal in smokers who may not want to stop but cannot smoke while in a smokefree environment.
- Cessation support (behavioural support and stop-smoking medicines), when given to hospital inpatients, effectively promotes long-term abstinence regardless of patient diagnosis, but only if it continues for at least one month after discharge.⁷

Technical information

Pre-operative cessation is associated with a reduced risk of post-operative pulmonary complications and improved wound healing. A systematic review of pre-operative smoking cessation² shows that both intensive and brief stop-smoking interventions increase the chances of a patient quitting at the time of surgery (that is, short term). More intensive interventions had a larger effect on short-term abstinence rates.

Stopping smoking before surgery is important for all smokers but even more so for elderly patients. In a systematic review of smoking status and post-operative outcomes in patients aged 70 years or over undergoing cardiac surgery, smokers had significantly higher rates of pulmonary complications, infections, longer stays in intensive care, higher rates of readmission to intensive care and increased rates of dying in hospital.³³ Stopping smoking before surgery decreases the risk of wound infection, delayed wound healing and post-operative pulmonary and cardiac complications.²

Post-operative smoking cessation is also beneficial. A randomised controlled trial (RCT) investigated the effects of a stop-smoking intervention in patients requiring surgery for acute fractures. Those who received a stop-smoking intervention had a significantly lower incidence of at least one post-operative complication.³⁴

Key messages for cancer service providers

- Almost 35 percent of all cancers are directly related to tobacco smoking.³⁵
- Smoking has a direct effect on treatment outcomes and survival in cancer patients. Stopping smoking is associated with:
 - increased quality of life
 - decreased risk of secondary malignancies
 - increased survival time
 - decreased post-operative complications for those who need to undergo surgery
 - improved response to chemotherapy and radiation.^{36, 37}
- Many cancer patients who smoke want to stop, and many make a quit attempt around the time of diagnosis.
- Cancer patients who smoke do not usually ask how they should quit.³⁸
- Health workers working with cancer patients should:
 - routinely assess smoking status
 - advise on the impact of smoking on survival and outcome of treatments (for example, surgery, chemotherapy, radiotherapy and biological therapies)
 - offer advice and assistance to stop smoking (in many instances, people are seen frequently during oncology treatment, which provides a unique opportunity to provide stop-smoking support)
 - use NRT to manage nicotine withdrawal in smokers who may not want to stop but are unable to smoke while in smokefree environments.³⁹

Technical information

There is often some debate around stopping smoking in people diagnosed with cancer. Frontline health workers caring for these patients will know best when and how to raise the issue of smoking cessation. They should be careful to avoid assuming that people with cancer will not want to stop smoking.

People with lung cancer have an increased risk of developing a secondary tumour. Among smokers, this risk can be reduced by quitting.⁴⁰

Smokers are more likely to experience complications and greater morbidity associated with chemotherapy and radiotherapy compared with non-smokers.³³

Key messages for oral health service providers

- Smoking has a major impact on oral health.
 - Smoking is a major risk factor for gum disease, which can result in tooth loss.
 - Smoking is a major cause of oral cancers, including cancers of the lip, tongue, cheeks and other sites in the mouth.
- The longer someone smokes the greater their risk of oral cancer.
- Smoking affects recovery and healing from dental treatment and can cause problems after tooth extractions.
- Oral health providers are well placed to help patients quit smoking and can help people access NRT and stop-smoking services.

Technical information

A recent systematic review evaluated the effectiveness of smoking cessation interventions delivered by oral health providers.⁴¹ Multi-session behavioural support delivered by oral health providers increased long-term quit rates compared with no intervention, usual care or less intensive interventions.

Longitudinal studies found that compared with non-smokers (that is, those who have never smoked), current smokers are more than two times as likely to experience tooth loss.⁴² Studies have also found that they have a greater risk of experiencing dental implant failures and post-operative infections following insertion of dental implants.⁴³

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