Counselling Patients Who Smoke

A Guide for Dentists
Smoking causes at least 50 different illnesses, including many oral health problems.
In 2003, Quebec reported the highest proportion of smokers in Canada, with 25%. It also reported the highest average number of cigarettes consumed per day by daily smokers (16.8). Canadian Tobacco Use Monitoring Survey, 2003.
Acknowledgments

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Smoking is the main preventable cause of death in Quebec. It is not only a factor in some 13,000 deaths a year, but also has a serious impact on oral health, particularly because it can lead to cancer of the mouth and larynx.

Since 2003, thanks to the joint efforts of the Ministère de la Santé et des Services sociaux, regional public health boards, the Canadian Cancer Society and the Conseil québécois sur le tabac et la santé, different free services have been made available to help Quebecers kick the habit. Most smokers would like to quit, but it is extremely difficult for them to do so because it is such a strong addiction. They have to be able to rely on health and social services professionals, including dentists, to motivate and support them.

I would like to congratulate the Ordre des dentistes du Québec for collaborating with the Institut national de santé publique du Québec on this guide to counselling patients who smoke. You can most certainly play a key role in the battle by devoting just a few minutes to advising them on the importance of quitting and supporting them in their efforts. I invite you to take this responsibility seriously and give it the attention it deserves.

Philippe Couillard

Minister of Health and Social Services
The Ordre des dentistes du Québec is proud to join with the Institut national de la santé publique du Québec, the Ministère de la Santé et des Services sociaux and other health professionals in the battle against smoking. We all know smokers who long to escape this dependence. If we are to help them and eventually eradicate this serious public health problem, we must all join forces.

People are more aware of the adverse effects of smoking on overall health, from lung and heart disease to cancer, than of its impact on oral health. The members of the dental team must make it their job to inform patients. There is a lot to tell them. Smoking is the leading cause of oral and pharyngeal cancer. In addition, it is estimated that 50% of cases of periodontitis can be attributed to smoking. It reduces the chances of success of periodontal treatment and impairs oral wound healing. Moreover, smoking is by far the main factor in the failure of implant therapy treatment. And that’s not to mention the impact on aesthetics, the senses of taste and smell, and smokers’ breath.

This guide is intended for generalist dentists and specialists and any other health professionals wishing to take oral health considerations into account when counselling patients. It contains the information they need to better understand the issue of smoking and more effectively counsel patients who smoke. It also lists the resources that the Ministère de la Santé et des Services sociaux, in collaboration with other partners, offers free of charge to anyone wishing to quit. These resources are a good indication of the exceptional efforts Quebec authorities are making to combat smoking.

A brief talk with patients who smoke, lasting just three to ten minutes, can be enough to help them kick the habit once and for all. As experts concerned by the quality of oral care, the members of the dental team have the duty and obligation to pitch in. I am confident that they will do so enthusiastically.

Robert Salois

President
Smoking and Oral Health

The impact of smoking on overall health is well known, but it is just as harmful to smokers’ oral health. It is an important risk factor for many oral diseases.

About 60% of people in Quebec visit a dentist, so the members of the dental team are well placed to talk to smokers about the oral health problems associated with their habit.

Oral cancer

The most prevalent form of oral cancer is squamous cell carcinoma (Figure 1). It represents over 90% of all oral malignancies.1 The incidence of squamous cell carcinoma increases with age, peaking in the 60-69 age group.2 The most important risk factors for this disease are smoking and heavy drinking.

The carcinogenic effects of tobacco products—cigarettes, cigars, pipes and chewing tobacco—on the oral mucosa are well known. They are linked to the amount of tobacco consumed and the length of consumption. Depending on the importance of these factors, smokers are two to twenty times more likely to have oral cancer than non-smokers.

Alcohol increases the risk of squamous cell carcinoma in smokers. The carcinogenic effects of tobacco are exacerbated by the simultaneous consumption of alcohol. In Canada, tobacco consumption and excessive alcohol consumption account for approximately 75% of oral and pharyngeal cancers.2

Leukoplakia

Leukoplakia is the most common precancerous lesion of the buccal mucosa. It may degenerate into oral cancer and present the same etiological factors. Leukoplakia is the oral lesion most often associated with tobacco use.3 It is six times more common among smokers than among non-smokers.4 The risk of malignant degeneration of a lesion varies with the type of leukoplakia, the site affected, the degree of epithelial dysplasia observed in the histology and the patient’s age and gender. A number of studies have shown that the incidence of leukoplakia declines when the patient quits smoking.5
Periodontitis

Longitudinal and transversal studies have clearly shown that smoking is a major risk factor for periodontitis, once variables such as age, gender, race and socioeconomic factors have been controlled for. More than half of all cases of chronic periodontitis can apparently be attributed to tobacco use. There is a positive correlation between the number of cigarettes smoked a day and the odds of developing periodontitis. Research has also shown that bone loss progresses faster in smokers than non-smokers.

Many authors have confirmed the relationship between smoking and the severity of periodontitis. Smokers show greater loss of alveolar bone than non-smokers, deeper periodontal pockets and a more pronounced loss of epithelial attachment. Smoking not only promotes the development of periodontal disease, but impairs its treatment, surgical or otherwise. Smokers who undergo guided tissue regeneration surgery have a lower success rate than non-smokers, and many of them do not respond favourably to periodontal therapy.

Dental implants

It has been clearly shown that smoking reduces the short- and long-term likelihood of successful dental implants. Smoking is the main factor likely to interfere with implant therapy: the failure rate is 11% among smokers as opposed to just 5% among non-smokers.

Studies have shown that smokers with osseointegrated implants have a significantly higher bleeding index than non-smokers, deeper peri-implant pockets, more marked peri-implant inflammation and mesial and distal bone resorption visible on X-rays.

Wound healing

Smoking is considered a complicating factor in the healing of surgical wounds, particularly those due to detartaring or periodontal curettage or periodontal surgery. Even the healing of wounds due to dental extractions seems to be delayed among smokers.

Smoker’s melanosis

Smoking can cause pigmented lesions or exacerbate existing pigmentations in the oral mucosa (Figure 2). Chemicals in tobacco smoke cause over-production of melanin, especially on the anterior labial gingiva. This type of melanosis occurs in 21.5% of patients who smoke. The intensity of the pigment is linked to the quantity of tobacco used and the duration of use. Smoker’s melanosis is asymptomatic and reversible. Nonetheless, it may take several years after the person has stopped smoking for the lesions to disappear.
Oral candidiasis

Smoking, on its own or associated with other factors, is an important predisposing factor in oral candidiasis.21,22 All patients who continue to smoke following anti-fungal treatment show relapses.22 On the other hand, clinical experience shows that this type of infection can disappear without treatment after patients quit smoking.

Oral candidiasis requires diligent attention by the dentist. Treatment may sometimes prove difficult. If candidiasis is linked to the presence of a generalized illness, it may be advisable to refer the patient to a physician.

Nicotine stomatitis

Nicotine stomatitis often appears on the palates of heavy smokers and pipe smokers in particular. It is asymptomatic and does not constitute a precancerous lesion. It disappears quickly after the person quits smoking.

Acute necrotizing ulcerative gingivitis

Acute necrotizing ulcerative gingivitis is a disease that evolves with relapses and remissions. Exacerbations cause the progressive destruction of gums and deep supporting tissue, most often without forming pockets (Figure 3). This disease appears to be more prevalent among smokers than non-smokers.24 A study on individuals with HIV showed a relationship between smoking and this kind of gingivitis.25

Aesthetics

Tobacco use stains teeth, obturations and prostheses26,27 more seriously than do tea or coffee.28 A dentist can observe black or brownish spots (Figure 4) on the tooth collar when performing a clinical examination, due to the combustion of tar and other substances contained in tobacco products.29 In fact, burns and stains can often be seen on the lips at the site where the cigarette or cigar is held.30

Taste, smell and halitosis

Many studies corroborate the fact that smoking dulls the senses of taste and smell.31,32 Tobacco products are also an important factor in bad breath, or halitosis.33

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Counselling Patients Who Smoke

It is important to properly measure the patient’s motivation, so as to advise him most effectively. For instance, it would not be useful to talk about pharmacological aids to someone who is not planning to quit smoking in the next six months. On the other hand, this does not mean that the dentist should not talk to him about it at all.

**Is the patient a smoker?**

Dentists must systematically evaluate their patients’ past and current status as smokers, as well as how many cigarettes they smoke daily, and record this information in patients’ files at every visit. They must pay particular attention to young people and evaluate their status, since they are taking up smoking at an increasingly early age—some as young as nine. Just ask the following questions:

<table>
<thead>
<tr>
<th>Do you smoke?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, every day <em>(How many cigarettes per day?)</em></td>
</tr>
<tr>
<td>Yes, occasionally</td>
</tr>
<tr>
<td>No, I have quit <em>(Since when?)</em></td>
</tr>
<tr>
<td>No, I have never smoked</td>
</tr>
</tbody>
</table>

**How motivated is the patient?**

Most smokers would like to quit, yet only 10% to 15% of them are actively preparing to give up smoking. The rest are thinking about the possibility of quitting or are not concerned about their smoking *(Table 1)*.1,2
### Table 1 — Stages of change in a smoker’s behaviour

<table>
<thead>
<tr>
<th>Are you thinking seriously of quitting?</th>
<th>Stage of change</th>
<th>Patient characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>No, not in the next six months.</td>
<td>Precontemplation: 50% to 60% of smokers</td>
<td>The patient does not see tobacco use as a problem, and has no intention of quitting.</td>
</tr>
<tr>
<td>Yes, in the next six months, but not within the coming month.</td>
<td>Contemplation: 30% to 40% of smokers</td>
<td>The patient is aware that smoking is a problem and is thinking about it. He would like to quit, but has not yet set a date.</td>
</tr>
<tr>
<td>Yes, within the coming month.</td>
<td>Preparation: 10% to 15% of smokers</td>
<td>The patient is preparing to quit smoking within the next month.</td>
</tr>
<tr>
<td>I quit smoking less than six months ago.</td>
<td>Action</td>
<td>The patient is coping with the problems that go along with quitting, i.e. withdrawal symptoms, cravings, cues that would normally have him reaching for a cigarette, etc.</td>
</tr>
<tr>
<td>I quit smoking six months or more ago.</td>
<td>Maintenance</td>
<td>The patient is pursuing his efforts to remain a non-smoker.</td>
</tr>
</tbody>
</table>

Adapted from Prochaska, Norcross, Di Clemente and the Collège des médecins du Québec.

### Table 2 — Benefits and drawbacks of smoking

<table>
<thead>
<tr>
<th>Main benefits</th>
<th>Main Drawbacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced stress</td>
<td>Stained teeth</td>
</tr>
<tr>
<td>Improved concentration</td>
<td>Infertility</td>
</tr>
<tr>
<td>Appetite control</td>
<td>Halitosis</td>
</tr>
<tr>
<td>Relaxation</td>
<td>Impotence</td>
</tr>
<tr>
<td>Opportunities for social interaction</td>
<td>Periodontal disease</td>
</tr>
<tr>
<td>No withdrawal symptoms</td>
<td>Cardiovascular disease</td>
</tr>
<tr>
<td></td>
<td>Shortness of breath</td>
</tr>
<tr>
<td></td>
<td>Pulmonary disease, including chronic bronchitis and emphysema</td>
</tr>
<tr>
<td></td>
<td>Aggravated asthma</td>
</tr>
<tr>
<td></td>
<td>Lung, laryngeal and oral cancer, etc.</td>
</tr>
<tr>
<td></td>
<td>Risk to pregnant women</td>
</tr>
</tbody>
</table>
Talking with smokers at the precontemplation or contemplation stage

All smokers see benefits and drawbacks to smoking. Those who are not thinking of quitting generally consider that the benefits outweigh the drawbacks. However, the more problems they see, the more motivated they will be to quit (Table 2, page 13).

What the dentist needs to do is ask the smoker, using open and non-threatening questions, just what he gets from smoking. This will encourage him to think about his behaviour and to understand the obstacles preventing him from quitting.

The dentist should then summarize what the patient has just said, and explain the symptoms, disorders and clinical signs related to smoking. A personalized description of the health risks of smoking always makes an impression on smokers. It may also be worthwhile to talk about the short-term benefits of quitting, as well as some lesser-known advantages, such as a 50% drop in the odds of cardiovascular disease after one year (Table 3).

### Table 3 – Benefits of quitting smoking

<table>
<thead>
<tr>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved senses of taste and smell and oral health</td>
</tr>
<tr>
<td>Better performance in sports and recreational activities</td>
</tr>
<tr>
<td>Less coughing, hacking and respiratory infections</td>
</tr>
<tr>
<td>Freedom from dependence</td>
</tr>
<tr>
<td>Odds of cardiovascular disease drop by 50% after one year</td>
</tr>
<tr>
<td>Lower risk of cancer</td>
</tr>
<tr>
<td>Increased life expectancy</td>
</tr>
<tr>
<td>Monetary savings</td>
</tr>
<tr>
<td>Family members no longer exposed to secondhand smoke</td>
</tr>
<tr>
<td>Good example for children</td>
</tr>
</tbody>
</table>
Counselling patients on how to quit

It is essential to explain clearly, taking a personal and non-judgmental approach, that the most important thing smokers can do to protect their health is to stop smoking. The dentist should mention that he will always be available to encourage the patient in his efforts to quit.

Offering documentation

To add to the information provided during their discussion, the dentist can give the patient relevant documentation or recommend Websites to help with quitting (see Free Resources for Help with Quitting Smoking, page 27).

Although it is very heartening to see the drop in smoking in Quebec in recent years, the fact remains that 1.6 million Quebecers are still addicted to tobacco. It is essential that all health professionals, including dentists, help smokers decide to quit. While it has been proven that the effectiveness of counselling sessions improves with length, it is also important to remember that the dentist’s contribution, no matter how short it may be, is sure to produce some results.

Doctor, I need your help!

Most people would like dentists to give their patients more health advice. According to a SOM-R survey done for the ODQ in May 2004, 79% of Quebecers said that dentists should devote more energy to prevention, for instance by giving suggestions on how to quit smoking.

Good reasons for speaking to patients

The World Health Organization estimates that oral health professionals should play a greater role in smoking-cessation programs for the following reasons:

- They know about the adverse effects in the oropharyngeal area and on oral health caused by tobacco use, and can talk about them with patients who smoke.
- They meet children and their parents on a regular basis, and thus have opportunities to influence individuals to avoid smoking or help them quit.
- They often have more time with patients than many other clinicians.
- They are as effective as other clinicians in helping tobacco users quit.
- Results are improved when more than one discipline assists individuals during the quitting process.

Endnotes

## Counselling Steps by the Dental Team

### Determine Whether the Patient is a Smoker

**Do you smoke?**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every day&lt;br&gt;Regular smoker&lt;br&gt;OR&lt;br&gt;Occasionally&lt;br&gt;Light smoker</td>
<td>Never smoked&lt;br&gt;Non-smoker&lt;br&gt;OR&lt;br&gt;I quit&lt;br&gt;Ex-smoker</td>
</tr>
</tbody>
</table>

Enter information in the patient's file

### Determine the Patient's Motivation

**Are you seriously thinking of quitting?**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, within the coming month</td>
<td>No, not in the next six months&lt;br&gt;Yes, in the next six months</td>
</tr>
</tbody>
</table>

**Stage of Change**

- Precontemplation
- Contemplation
- Preparation
- Action
- Maintenance

Enter information in the patient's file
3. Offer counselling according to the patient’s stage of change

- Talk about the impact of smoking on oral and overall health
- Discuss the benefits and drawbacks of smoking
- Discuss the benefits of quitting
- Urge the patient to quit smoking
- Offer documentation

4. Level of dependence

- How many cigarettes do you smoke a day?
- Do you smoke your first cigarette within 30 minutes of getting up in the morning?

5. Pharmacological aids

- Nicotine replacement therapy (NRT)
  - Gum
  - Patch
  - Inhaler
- Bupropion (Zyban®)

6. Free resources

- National toll-free telephone line 1 888 853-6666
- www.jarrete.qc.ca Website
- Quit-smoking centres
A patient who is thinking of quitting is almost certainly not trying for the first time. Sometimes it takes five to seven attempts before smokers can free themselves completely from this dependence. It is crucial that you encourage him to persevere.

Discuss useful strategies

People who are thinking of giving up smoking generally share the same worries about quitting, and their concerns are entirely legitimate. They worry about withdrawal symptoms and strong cravings. Many of them are concerned about gaining weight and wonder how they will cope when they are around smokers in social situations. Finally, they are aware that some triggers can make it hard to resist the desire to light up. As a dentist, you can help your patients kick the habit by advising them on strategies for dealing with concerns like these (Table 1).

You may wish to advise a smoker who is thinking of quitting to keep a journal for a few days as a way of understanding himself better, in particular by keeping track of events and circumstances that trigger the desire to smoke. For example, some smokers feel the urge to light up whenever they pick up the telephone. This type of habit is sometimes so ingrained that they are not even aware of it. By carefully examining his journal entries, you can pinpoint the specific times and circumstances most likely to trigger his desire to smoke, and then suggest realistic ways of coping.

Finally, it is always good to remind patients thinking of quitting of the benefits of giving up smoking. Some can be seen very soon—as soon as 20 minutes after the last cigarette—while others will be felt over the space of several years (see Some benefits of quitting, page 21).
Table 1 – Frequent concerns about quitting smoking and strategies to suggest

<table>
<thead>
<tr>
<th>Concerns</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawal symptoms</td>
<td>Consider pharmacotherapy (nicotine gum, patch or inhaler, bupropion, etc.)</td>
</tr>
<tr>
<td>Strong cravings</td>
<td>Do something else</td>
</tr>
<tr>
<td></td>
<td>Wait two or three minutes for the craving to pass</td>
</tr>
<tr>
<td></td>
<td>Breathe deeply</td>
</tr>
<tr>
<td></td>
<td>Have a drink of water; eat some raw vegetables</td>
</tr>
<tr>
<td>Stress management</td>
<td>Avoid or change sources of stress</td>
</tr>
<tr>
<td></td>
<td>Change reaction to stress</td>
</tr>
<tr>
<td></td>
<td>Use relaxation techniques</td>
</tr>
<tr>
<td>Weight gain</td>
<td>First concentrate on quitting smoking</td>
</tr>
<tr>
<td></td>
<td>Adopt habits like exercising and healthy eating</td>
</tr>
<tr>
<td></td>
<td>Consider using nicotine gum</td>
</tr>
<tr>
<td>Social relationships</td>
<td>Tell smoker friends about your decision</td>
</tr>
<tr>
<td></td>
<td>Ask for support from family members, friends and colleagues</td>
</tr>
<tr>
<td></td>
<td>Go to places reserved for non-smokers</td>
</tr>
<tr>
<td>Trigger factors</td>
<td>Reduce alcohol and coffee intake</td>
</tr>
<tr>
<td></td>
<td>Alter habits related to smoking</td>
</tr>
<tr>
<td></td>
<td>Get rid of all cigarettes</td>
</tr>
</tbody>
</table>

Adapted from the Collège des médecins du Québec.¹

Determine the level of dependence

It is essential to determine the patient’s level of dependence. You can do so using two questions from the Fagerström test:²

**How many cigarettes do you smoke a day?**

**Do you smoke your first cigarette within 30 minutes of getting up in the morning?**
The more cigarettes the patient smokes a day and the sooner he lights up after waking, the higher the level of dependence is likely to be. This means that the smoker is very likely to experience withdrawal symptoms such as irritability, anxiety, impatience and nervousness; difficulty concentrating; uncontrollable cravings; headaches, difficulty sleeping, constipation, increased appetite, trembling, heavy sweating and dizziness.¹

These symptoms appear in the first 48 hours and gradually fade over the next two to five weeks. The dizzy spells will disappear quickly; on the other hand, difficulty concentrating, impatience, anxiety and irritability may last for several weeks. A doctor can prescribe certain drugs to ease such discomfort.

**Talk about pharmacological aids**

Many smokers resist taking drugs because they are afraid of becoming addicted. It has been shown that nicotine replacement therapies (NRT) like nicotine gum, patches or inhalers, as well as bupropion, double the success rate for quitting and are very unlikely to be addictive.²,³ Moreover, these products do not contain the 4,000 chemicals found in tobacco smoke.

US guidelines recommend that pharmacotherapies be used for all smokers who smoke 10 or more cigarettes per day, provided there are no contraindications.² NRT and bupropion are recommended as the first-line choices, but contraindications and the smoker’s preferences, experience with other drugs in the past and personal characteristics must be taken into account in choosing a pharmacological aid (see Pharmacotherapy and Tobacco Dependence, page 22).

**Set a quitting date**

In closing the consultation, the dentist should ask when exactly the smoker plans to quit. That way he can follow up at the patient’s next appointment or refer the patient to local resources, as necessary. If possible, the dentist can even assure the patient that he or a member of his team will be available at all times to offer support over the telephone or at the office during the week when the patient is attempting to quit. Many smokers weaken and start smoking again during the first week, and encouragement, particularly from a health professional, is very important.

**Doctor, I couldn’t do it...**

*A patient tells you that she has started smoking again. She looks rather uncomfortable, and is disappointed with herself for failing after trying so hard. Reassure her and tell her that she shouldn’t see her relapse as a personal failure. Encourage her to give it another try. It takes most smokers several attempts, often five to seven, before they finally manage to butt out for good.*
### Some Benefits of Quitting

**After just 20 minutes** — Blood pressure and pulse return to normal, along with hand and foot temperature.

**After 8 hours** — Carbon monoxide count in the body drops and the oxygen level in the blood rises, as both return to normal.

**After 24 hours** — The odds of a heart attack decline.

**After 48 hours** — The senses of taste and smell improve and nerve endings begin to grow again.

**After 3 months** — Blood circulation improves, and pulmonary function increases by about 30%.

**After 9 months** — There is a significant improvement in breathing (less coughing and nasal congestion). Fatigue and shortness of breath diminish.

**After 1 year** — The risk of coronary disease is half that for a smoker.

**After 5 years** — The odds of oral, laryngeal and pharyngeal cancer are half those for a smoker.

**After 10 to 15 years** — The risk of heart disease is almost similar to that for a non-smoker.

**After 15 years** — The mortality rate attributable to lung cancer is greatly reduced.

Adapted from a guide produced by Pratt & Whitney Canada and the Direction de la santé publique de la Montérégie.

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**Tell the patient about the free resources available**

Since 2003, smokers in Quebec wishing to quit have had even more free resources at their disposal. If the patient says he needs additional support, the dentist can suggest one of a number of tools: the toll-free smokers’ helpline, at 1 888 853-6666, the [www.jarrete.qc.ca](http://www.jarrete.qc.ca) Website (in French) and quit-smoking centres (see *Free Resources for Help with Quitting Smoking*, page 27).

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**Endnotes**


The strong dependence created by nicotine must not be underestimated. As soon as a smoker quits, he experiences physical withdrawal symptoms, which are a major obstacle to successfully butting out (Table 1). Over 80% of people who quit smoking have such symptoms to varying degrees. Unless there are contraindications related to the smoker’s health, anyone wishing to quit smoking should be encouraged to use pharmacological aids such as a nicotine replacement product or bupropion, since they considerably ease such symptoms and reduce cravings. They also help to prevent mood swings and improve concentration and the ability to handle stress. Finally, they double the success rate for quitting smoking.

Nicotine replacement therapy

Nicotine replacement therapy (NRT) provides less nicotine than tobacco, but helps to ease the frequency and intensity of withdrawal symptoms. In Quebec, NRT comes in three forms: nicotine gum, patches and inhalers. The choice of the form of therapy is a matter of individual preference, since no studies have shown one form to be more effective than another. Nonetheless, NRT has contraindications that must be considered (see the sidebar on NRT contraindications).

Nicotine gum

Nicotine gum is more like an oral patch than real chewing gum. It comes in 2 mg and 4 mg doses. The 4 mg tablets are recommended for people who smoke their first cigarette within 30 minutes of waking up, while the 2 mg form is recommended for people with a weaker dependence.

NRT contraindications

- Recent heart attack
- Recent stroke
- Unstable or severe angina
- Severe arrhythmia
- Pregnancy or nursing
- Under age 18

Source: Compendium of Pharmaceuticals and Specialties (CPS) 2004
The way the gum is used is very important, since chewing it too quickly can irritate the mouth and throat and cause hiccups, nausea or dyspepsia. For maximum effect, the gum should be chewed two or three times and then slipped between the gum and cheek for one minute. Then it should be transferred to the other side of the mouth, and so on for 30 minutes.

The gum should be used at set times—once an hour, for example—but can also be chewed as necessary. The dosage should not exceed 20 tablets daily, although most smokers chew about a dozen a day. It is recommended that the treatment be used for 12 weeks and, if the person is worried about a relapse, that it be continued for another 12 weeks. Nicotine gum can temporarily limit weight gain during the treatment period.

### Table I – Physical symptoms of nicotine withdrawal

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Duration</th>
<th>Suggestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dizziness</td>
<td>1 to 2 days</td>
<td>Relax, control breathing</td>
</tr>
<tr>
<td>Headaches</td>
<td>Variable</td>
<td>Relax</td>
</tr>
<tr>
<td>Fatigue</td>
<td>2 to 4 weeks</td>
<td>Get exercise and more sleep</td>
</tr>
<tr>
<td>Cough</td>
<td>Less than 7 days</td>
<td>Drink water</td>
</tr>
<tr>
<td>Tightness in chest</td>
<td>Less than 7 days</td>
<td>Relax</td>
</tr>
<tr>
<td>Trouble sleeping</td>
<td>Less than 7 days</td>
<td>Don’t drink or eat anything containing stimulants, like coffee, chocolate or cola, in the evening</td>
</tr>
<tr>
<td>Constipation</td>
<td>3 to 4 weeks</td>
<td>Drink plenty of water, eat high-fibre foods, exercise</td>
</tr>
<tr>
<td>Hunger</td>
<td>A few weeks</td>
<td>Eat three low-calorie meals daily</td>
</tr>
<tr>
<td>Lack of concentration</td>
<td>A few weeks</td>
<td>Expect this and be ready for it</td>
</tr>
<tr>
<td>Very strong craving for cigarettes</td>
<td>Especially in the first two weeks</td>
<td>Do something else. The craving usually lasts three minutes</td>
</tr>
</tbody>
</table>

Nicotine patches

Nicotine patches are easy to use. They are applied to the chest or the outer arm. The skin must be clean, dry, healthy and smooth. The main side effects are skin irritations, but this inconvenience can be avoided by applying the patch in a different place every day. Nicotine patches are contraindicated for anyone with an allergy to adhesive in bandages or with a generalized skin disease.

Nicotine inhalers

Nicotine inhalers are a recent arrival on the Canadian market. They have a plastic mouthpiece in which one inserts a 10 mg nicotine cartridge. Since the device imitates the act of smoking, it can be ideal for smokers with a strong behavioural dependence. The nicotine is absorbed through the oral mucosa and the throat. It does not reach the lungs, despite what the term “inhaler” might suggest. The recommended dosage is 6 to 12 cartridges a day.

Bupropion

Sustained-release bupropion hydrochloride is marketed under the name Zyban®. It was originally developed as an antidepressant, but is now also used as a smoking-cessation aid. It acts on the brain by increasing noradrenalin and dopamine levels. Its effectiveness has been proven by two double-blind placebo-controlled clinical trials, which showed that bupropion doubles the success rate for cessation and reduces withdrawal symptoms. It also has the benefit of limiting the weight gain that often accompanies quitting.

Bupropion comes only in 150 mg tablets. Treatment starts one week before the quitting date and lasts two to three months. It may be extended for up to one year. The patient takes one 150 mg tablet daily for the first three days and then doubles the dosage and continues with 300 mg daily until the end of the treatment, with an interval of eight hours between the two daily doses. The best time to quit smoking is during the second week of treatment.

At present, members of the Ordre des dentistes du Québec are not authorized to prescribe bupropion, so dentists must refer patients wishing to quit smoking to a physician, who will give them a prescription.
Maximizing the chances of success

NRT and bupropion improve the likelihood of succeeding for smokers wishing to quit. They ease withdrawal symptoms such as irritability, depression and nicotine cravings, although they cannot completely eliminate the craving for tobacco. It is essential that patients themselves truly want to quit.

Dentists who counsel patients who smoke must take the time to discuss the problems involved in quitting and ways of coping (Table 1, page 19). They can also inform their patients of the resources at their disposal, in particular the national smokers' helpline (1 800 853-6666), the www.jarrete.qc.ca Website and quit-smoking centres (see Free Resources for Help with Quitting Smoking, page 27).

**ENDNOTES**

**My father smoked and he was never sick a day in his life. Why should I quit?**

That’s possible, but if so he was very lucky. You may not be as fortunate. It’s well known that smoking causes about 50 different illnesses, including 85% of pulmonary disorders and lung cancer cases, as well as 30% of cardiovascular diseases and other types of cancer. One smoker in two will die prematurely. Smoking is like playing Russian roulette. Think about yourself, but remember your loved ones, too.

**I smoke light cigarettes, so it’s not dangerous.**

The risks are just as high, because most people who smoke light cigarettes try to compensate for the lower nicotine content by inhaling more often and more deeply than those who smoke regular cigarettes. All cigarettes are bad for you—they contain 4,000 or more toxic substances!

**I can’t quit smoking. I’ll get fat!**

Which is more dangerous, putting on a few pounds or continuing to smoke? The most important thing is protecting your health, not destroying it. It is possible to stop smoking without putting on too much weight or even without gaining any at all. Since food will taste better, you’ll tend to want to eat more. But by choosing healthy foods and getting some exercise, you can control your weight.

**It’s too late for me to stop anyway.**

It’s never too late to stop smoking. Some benefits of quitting show up very quickly. For instance, just 24 hours after butting out, you will be at less risk of a heart attack. Within one to five years of quitting, you will have considerably reduced the odds of coronary disease and certain cancers. Think about yourself, but remember your loved ones, too.

**I like smoking. I find it relaxing.**

There are many sources of enjoyment that are less harmful than smoking, and you can pay for them with the money you save by not buying cigarettes. The feeling of relaxation you get is actually just the result of temporarily satisfying your craving for a cigarette.

**It’s too hard. I’m afraid I’ll fail.**

There are more ways than ever before to quit smoking. Some pharmacological aids are available over the counter, including gum, patches and nicotine inhalers, while others like Zyban® can be prescribed by a doctor. All these products, except inhalers, are covered by the Quebec drug insurance plan. The government also offers a wide range of resources free of charge, like a national toll-free telephone line, a Website and quit-smoking centres. It’s normal to be afraid, but there are lots of people ready to help you quit.

**We all have to die sometime.**

Why run the risk of dying prematurely, though? By continuing to smoke you are not only shortening your life expectancy, but also putting yourself at risk of cancer or a chronic disease. You could be sick for years, and your quality of life and that of the people around you would suffer.
In recent years, Quebec has poured a great deal of energy into efforts to reduce smoking. These efforts consist mainly of free resources that the Ministère de la Santé et des Services sociaux, in collaboration with the health and social services network, the Conseil québécois sur le tabac et la santé and the Canadian Cancer Society, has set up to help people who want to butt out. It is essential that the members of the dental team be familiar with these resources.

**A national toll-free telephone line:**
1 888 853-6666

An expert is available weekdays from 8 a.m. to 8 p.m. to support smokers in their efforts to quit, and can also suggest tools and services tailored to the individual’s needs, such as:
- information and documentation;
- on-the-spot or in-depth counselling and intensive support;
- referral to other services, in particular local quit-smoking centres.

**The www.jarrete.qc.ca Website (in French)**

This interactive gateway site has all sorts of on-line services to help smokers quit, along with a chat room, a forum and a list of quit-smoking centres. One part of the site is designed specifically for teens. An essential tool for anyone wishing to kick the habit.

**Quit-smoking centres**

Quit-smoking centres offer a free range of individually tailored services to help smokers give up cigarettes. The services are provided by health and social services professionals or other specially trained experts. They include:
- information and documentation;
- on-the-spot or in-depth counselling and intensive support (by telephone or in person, individual or group meetings);
- referral to other services.

**Essential sites**

- www.jarrete.qc.ca
- www.lagangallumee.com
- www.defitabac.qc.ca (Bilingual)
- www.cqts.qc.ca
- www.cancer.ca (Bilingual)
- www.msss.gouv.qc.ca
Continuing Education Program

Test Your Knowledge

L’Ordre des dentistes du Québec offers its members a chance to earn two continuing education credit-hours, if they correctly answer the following questions. In keeping with its policy on continuing education in dentistry, the Order grants this number of hours for self-directed study activities.

Circle a single answer per question on the answer sheet on page 29.

Mail this sheet to the Direction des services professionnels, Ordre des dentistes du Québec, 625 René-Lévesque West, 15th floor, Montreal, Quebec or fax it to (514) 875-5673.

1 Which of the following statements concerning the percentages of smokers at the precontemplation, contemplation and preparation stages is correct?
   a. Their percentages are respectively 30% to 40%, 50% to 60% and 10% to 15%.
   b. Their percentages are respectively 50% to 60%, 30% to 40% and 10% to 15%.
   c. Their percentages are respectively 30% to 40%, 50% to 60% and 5%.
   d. None of the above.

2 The short-term benefits of quitting smoking include a decrease of what percentage in the risk of cardiovascular disease after one year?
   a. 10%
   b. 30%
   c. 50%
   d. 80%

3 The main factor likely to interfere with successful dental implants is:
   a. The diagnosis
   b. The patient’s age
   c. The patient’s oral hygiene
   d. Smoking

4 A patient who smokes asks you to refer him to free assistance to help him quit. Which of the following is not one of the resources offered in Quebec?
   a. The www.jarrete.qc.ca Website
   b. Laser therapy clinics
   c. Quit-smoking centres
   d. A national toll-free telephone line: 1 888 853 6666

5 Smoker’s melanosis is:
   a. Symptomatic and reversible
   b. Asymptomatic and irreversible
   c. Symptomatic and irreversible
   d. Asymptomatic and reversible

6 One of the symptoms of nicotine withdrawal is a very strong craving for a cigarette. This occurs during:
   a. The first week
   b. The first two weeks
   c. The first four weeks
   d. The first six weeks
7. A patient’s high level of dependence on tobacco products may be associated with:

a. The number of years for which the patient has smoked regularly.
b. The habit of smoking during social occasions.
c. The habit of smoking only regular cigarettes.
d. The number of cigarettes smoked daily and the habit of smoking the first cigarette within 30 minutes of waking in the morning.

8. Dentists should recommend the use of pharmacological aids for patients who smoke:

a. 10 or more cigarettes a day
b. 15 or more cigarettes a day
c. 20 or more cigarettes a day
d. 25 or more cigarettes a day

9. A patient wishing to quit smoking asks you to advise him on the most effective nicotine replacement therapy. You tell him:

a. Nicotine gum
b. Nicotine patch
c. Nicotine inhaler
d. It depends on the patient’s preferences and the contraindications.

10. Bupropion hydrochloride, or Zyban®, is used to help smokers quit. Which of the following statements is false?

a. It doubles the success rate.
b. It is an anti-depressant.
c. It reduces withdrawal symptoms.
d. It does not limit the weight gain associated with quitting smoking.
In the 12 months preceding the Canadian Tobacco Use Monitoring Survey, in 2003, 52% of smokers made one to three quit attempts, while 18% made four or more.

Your contribution could make a difference in the life of one of the 500,000 Quebecers who want to stop smoking.

Help them quit for good.