



## Tobacco, Women's Health & Cessation

### Introduction

Women and men initiate tobacco use for different reasons, and this use impacts their health and well-being in different ways.<sup>1</sup> Understanding a woman's experience using tobacco, including the health effects, their reasons for using, and potential barriers to quitting, and implementing an inclusive approach to cessation that acknowledges the intersectionality of sex, gender, and equity are important components to effective tobacco intervention.<sup>2</sup>

### Impact of Tobacco on Women's Health

Nicotine is an addictive substance for anyone who uses it; however, females have an increased risk of becoming addicted to nicotine, at lower levels of use, relative to males.<sup>3</sup> Likewise, the health risks that come with using tobacco are greater for women than they are for men, even when they use less tobacco.

### Respiratory illnesses and lung cancers:

Women are at greater risk of developing respiratory illnesses and cancers from tobacco use. Women who use or are exposed to second-hand smoke are more vulnerable to developing chronic obstructive pulmonary disorder (COPD) compared to men, due in part to hormonal differences and women tending to have smaller airways and lung volumes.<sup>4,5,6</sup> Women are also more likely to develop chronic bronchitis rather than the emphysema form of COPD.<sup>6</sup> Among COPD patients, women report greater lung-function decline and more severe symptoms compared to men,<sup>5</sup> and early onset of severe COPD is more common among women than men.<sup>7</sup> Women are also more susceptible to smoking-related lung cancers, including squamous cell, adenocarcinoma and small-cell carcinoma.<sup>8,9</sup> Smoking causes about 80% of all lung-cancer deaths in women.<sup>10</sup>

**Heart disease:** Women who smoke experience an increased risk of coronary heart disease compared to men.<sup>11</sup> There is some evidence that women who smoke may also be

more susceptible to developing elevated blood lipids compared to men.<sup>12</sup> Among women and men who smoke and who have experienced a heart attack, women experience greater reductions in life expectancy.<sup>13</sup>

**Breast cancer and other cancers:** Women who smoke and those exposed to second-hand smoke are at an increased risk for breast cancer, compared to women who do not smoke or who are not exposed.<sup>14,15,16</sup> In addition to lung and breast cancer, women who smoke have increased risks of cancers of the mouth and throat, esophagus, larynx (voice box), bladder, pancreas, liver, colon, rectum, cervix, kidneys and some types of ovarian tumours.<sup>17</sup>

**Reproductive health and pregnancy:** Smoking among women is linked to lowered fertility, an increased risk of osteoporosis, and many other reproductive health issues.<sup>18,19</sup> The effects of tobacco use and exposure for pregnant women include an increased risk of miscarriage, ectopic pregnancy, preterm labour, premature rupture of membranes and placental problems (previa and abruption).<sup>17</sup> Tobacco use during pregnancy not only affects the health of the woman, fetus and newborn, but also continues to affect the health of the child over time.<sup>20</sup> More about the specific effects of smoking on reproduction, pregnancy, infants and children can be found on [MyHealth.Alberta.ca](http://MyHealth.Alberta.ca) – search smoking and pregnancy.

**Mental-health issues:** There is some evidence that tobacco use is associated with more depressive symptoms in adolescent girls.<sup>21</sup> There is also evidence linking smoking,

depressive symptoms and menstrual symptoms in girls.<sup>22</sup>

**Other health issues:** Compared to men, women who smoke experience higher rates of asthma and higher rates of urinary incontinence.<sup>23</sup> Heavy smoking has also been associated with lower bone development among adolescent girls.<sup>24</sup>

## Gendered Influences on Tobacco Use and Barriers to Quitting

There are gender-related factors affecting the meanings of and reasons for smoking among women. There is some evidence that nicotine may have a more calming, anti-anxiety effect for women compared to men, and women may be more likely to smoke to manage a negative emotional state.<sup>25,26</sup> Women as a group have also been targeted by the tobacco industry, which has portrayed smoking as a means of achieving empowerment and beauty.<sup>27</sup> There are numerous studies that indicate women face unique barriers to stopping the use of tobacco.<sup>23,28,29</sup> These barriers include:

- Women may be concerned about the potential for weight gain.<sup>23,30</sup>
- Women are more likely to experience interpersonal violence and depression.<sup>31</sup>
- Women experience greater rewarding effects from nicotine and more intense stress from withdrawal than men.<sup>26</sup>
- Male partners have been shown to provide less effective cessation support to women than women give to men.<sup>32</sup>
- Women may be more susceptible to environmental cues (e.g., friends and moods)<sup>26</sup> or experience particular motives (e.g., for socialization or as a break from care-giving)<sup>33,34</sup> that reinforce tobacco use.

- Some women enjoy the feeling of control associated with tobacco use.<sup>35</sup>

There are also gender-based influences for women attempting to quit smoking including:

- Women experience greater rewarding effects from nicotine and more intense stress produced by withdrawal than men do.<sup>36</sup>
- Nicotine replacement therapy (NRT) (especially gum and patches) may not be as effective for women, due to hormonal, physiological and pharmacokinetic differences that exist and become more prevalent in pregnancy.<sup>37</sup>
- Tobacco withdrawal symptoms and responses to cessation pharmacotherapy vary by menstrual cycle phase (women experience greater withdrawal symptoms during the luteal phase).<sup>38</sup>

## Approaching Cessation with Girls and Women

Approaches that consciously address sex, gender and equity will improve smoking cessation and reduction outcomes. A woman-centred approach, that focuses on the health, strengths, interests, needs and self-efficacy of the woman, is crucial.<sup>2</sup> Gender-transformative approaches that aim to reduce tobacco use by examining and challenging stereotypical gender norms and imbalances of power are also an important route to improving equity and health at the same time.<sup>2</sup>

Figure 1 displays the key principles for working with girls and women who use, or are exposed to tobacco products. Understanding and integrating these principles into intervention ensures the interaction is respectful, sensitive, effective and empowering for women and girls as they deal with their tobacco use.

**Figure 1. Principles of Practice with Women**



In practice, this means that girls and women at all stages of life are given the opportunity to learn about the health effects of tobacco products, and offered gender appropriate resources and support when they are ready to change their tobacco use. Even though some women might not be ready to quit, they may be interested in cutting back or learning how to reduce the impact of second- or third-hand smoke in their lives. Such supports may include physical activity advice, nutritional counselling, stress reduction techniques, relationship counselling and/or help dealing with stigma.

The 5 As Approach (Ask, Advise, Assess, Assist and Arrange) for tobacco intervention can be applied for all girls or women. This model follows a specific algorithm, but can be easily adapted to client needs and the health provider's personal style. For more information contact the [tru@ahs.ca](mailto:tru@ahs.ca) for a copy of the *Baby Steps Help Guide*.



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