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Prenatal and Postpartum Women and Tobacco

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Prenatal and Postpartum Women and tobacco

In the past decade, there has been a growing awareness that the use of tobacco products in pregnancy and the presence of environmental tobacco smoke (ETS) have numerous, serious health effects for both the mother and the fetus. A Health Canada literature review of the impact of tobacco use and exposure during the preconception, prenatal and postpartum periods documented a range of health-compromising effects.[1] Maternal smoking during pregnancy has been associated with low birth weight babies, placenta previa and premature birth. Environmental tobacco smoke has been associated with ear infections, a range of respiratory illnesses and Sudden Infant Death Syndrome among infants and children.

At the outset of the Tobacco Demand Reduction Strategy (TDRS), about 37% of Canadian women of child-bearing age used tobacco.[2] There were only a few programs to support women who wanted to reduce their tobacco use during pregnancy or create smoke free homes for their infants. Prenatal and postpartum women were identified as a priority group of the TDRS. Steps were taken to identify and deliver the programs and resources needed by prenatal and postpartum women, as well as disseminate knowledge about effective programming to service providers who work with pregnant women. This work provided new programming options for women and service providers alike.

[1] Edwards, N., Sims-Jones, N., Hotz, S. (1994) *Pre- and Postnatal Smoking: A review of the literature*, Ottawa: Health Canada.
[2] Health Canada (1994) *Tobacco Demand Reduction Strategy: An Overview*.

Inside: KEY LESSONS

4 Pregnant women are motivated — quitting is still difficult.

8 Most women who quit smoking during pregnancy relapse after the baby is born.

10 A variety of ways of increasing program effectiveness has been implemented.

14 Service providers feel most effective with adequate training and support.

18 Family approaches to creating smoke free environments for infants and children are needed.

Background: Information about tobacco control in Canada and this document.

1 About the Tobacco Demand Reduction Strategy.

In February 1994, the federal government launched a comprehensive, three-year initiative to counteract tobacco use in Canada, the Tobacco Demand Reduction Strategy (TDRS). The TDRS was developed to be consistent with the work and directions of the National Strategy to Reduce Tobacco Use (NSRTU), launched in 1987.

The goals of the TDRS were:

- to help non-smokers stay smoke free;
- to encourage and help those who want to quit smoking to do so; and
- to protect the health and rights of non-smokers.

2 About the Summary Series – Lessons Learned from the TDRS.

This is one in a series of five summaries that present the lessons learned from the Tobacco Demand Reduction Strategy. Other topics include Women, Aboriginal Peoples, Francophones and Youth. The summaries are intended to assist health professionals and policy makers in shaping future action on tobacco reduction. Each summary identifies key lessons that have been drawn from the work completed on the topic and profiles a few of the many community-based projects and local and national resources developed under the TDRS. Descriptions of these projects and resources appear throughout the summaries.

Codes such as “A4” and “W10” refer to complete references for TDRS resources which are listed at the end of the summary.

3 About the Tobacco Control Initiative.

The Tobacco Control Initiative (TCI), which was announced in November, 1996, is a $100 million commitment by the federal government over five years, beginning in 1997/98. The four key elements of this comprehensive strategy are legislation and regulations, enforcement, research, and public education.

Building upon the lessons learned and the results achieved under TDRS and other tobacco strategies, the Public Education Component of the TCI aims to improve the overall health and quality of life of Canadians, particularly young Canadians, through:

- the identification and dissemination of best practices;
- training and consultation to enhance the capacity of communities to deliver effective tobacco reduction programs; and
- building public concern about tobacco and the tobacco industry.

In partnership with the provinces, territories, health, community and youth-oriented organizations, the TCI will expand prevention, protection and cessation efforts which began under the TDRS.

ACKNOWLEDGEMENTS

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4 About This Summary – Prenatal and Postpartum Women and Tobacco.

The TDRS prenatal and postpartum initiative consisted of a combination of literature reviews, broad-based surveys, qualitative studies, specialized studies to design and test interventions and resource development projects. Synthesis work was conducted throughout 1997 to pull together the conclusions and insights of all TDRS projects and activities related to prenatal and postpartum women. The resulting lessons are organized into five major topics presented in this summary.

Lesson One: Pregnant women are motivated – quitting is still difficult.

1 Although it is difficult to obtain exact numbers, it appears that smoking prevalence rates during pregnancy have declined from the 1960s to the 1990s.

A pre-TDRS review of the literature on smoking in pregnancy (P3) noted that no national data documenting smoking trends during pregnancy were available for Canada. The review used provincial data as well as data from the U.S. and Europe to examine smoking prevalence trends among pregnant women. The resulting picture mirrors that of smoking prevalence trends in general – fewer women are smoking during their pregnancies in the 1990s than in the 1960s.

2 Women may have greater intentions of quitting during pregnancy than at other times in their lives.

During pregnancy, women who smoke may find themselves questioning their smoking behaviour and trying to change it. In qualitative work conducted by several of the community-based TDRS projects, pregnant women indicated that they wanted to quit smoking and they were willing to participate in the development and testing of resources and programs (B6, K2, S16, T12). Studies cited in a pre-TDRS literature review (P3) found that pregnant women are more likely to quit smoking and smoke fewer cigarettes on average than women smokers who are not pregnant. The literature review also noted that the intention to quit is something that women seem to act

on early: most pregnant smokers who attempt to quit do so during the first trimester of the pregnancy.

3 According to TDRS survey data, the majority of current female smokers continued to smoke during their most recent pregnancy.

The *Survey of Smoking in Canada (SOSIC)* (S8) collected information on a sample of roughly 15,800 Canadians over the age of 15. The information was collected in four cycles that were three months apart. The survey measured levels and changes in cigarette smoking behaviour over the course of one year. It was also one of the first national surveys on smoking that collected specific information related to tobacco use during pregnancy.

In its first cycle, the survey found that smoking prevalence for women of reproductive age (15- to 44-year-olds) was almost 34%. Smoking prevalence rates among 15- to 19-year-olds were 29% compared to 38% among 20- to 24-year-olds and 34% for 25- to 44-year-olds.

Of all women aged 20 to 44 years (smokers and non-smokers) who had been pregnant in the previous five years, 19% reported that they had smoked "regularly" during their most recent pregnancy. However, 58% of the women who currently smoke reported that they had smoked during their most recent pregnancy (S8, Cycle 4).

Whether they actually quit smoking or not, pregnancy is a time when many women seriously think about their smoking behaviour. A qualitative study of 43 women found that many of them described their pregnancies as a time when they thought of their smoking differently (R7). This openness to thinking about the role that smoking plays in their lives makes the prenatal period an important opportunity for tobacco reduction intervention.

4 Certain groups of women find it harder to quit than others.

TDRS work identified several differences between women who quit smoking during pregnancy and women who continue to smoke. Smoking during pregnancy is most common among women who are 20 years of age or younger and is more prevalent among women who started smoking at a younger age (P3). Pregnant women who feel confident about their ability to quit and have a high perception of risk appear to progress toward quitting and staying quit, even without any intervention (R7).

The relatively high rate of smoking prevalence among pregnant women begs the question: Why do women smoke during pregnancy? The social context of women's lives is an important factor in their continuing to smoke during pregnancy. The women who continue to smoke during pregnancy tend to be the women who are surrounded by family members and friends who smoke. A literature review of smoking and high-risk women found that continued smoking in pregnancy is associated with having a smoking partner and being exposed to environmental tobacco smoke, among other factors (S4). In a study of pregnant and postpartum smokers, over 50% of the 226 respondents reported that at least half of their close friends and family members smoked (R7).

5 Providing cessation support may reduce the percentage of women who smoke during pregnancy.

There is relatively little data available to indicate what methods (e.g. nicotine replacement therapy, group programs, self-help materials) women who smoke use to quit smoking during their pregnancies. About 13% to 21% of pregnant women quit smoking spontaneously – without a service provider's intervention – when they are planning to become pregnant or as soon as they find out that they are pregnant (P3, T2e). An additional 2% to 22% of pregnant smokers may quit spontaneously later in their pregnancy (P3, T2e). In total, a low of 15% to a high of 43% of pregnant smokers may quit spontaneously. It is possible that these quit rates could be increased if pregnant smokers have access to a range of cessation interventions and options specifically designed for pregnant women.

Counselling ABORIGINAL WOMEN during pregnancy

The Northern Family Health Society in Prince George, B.C. wanted to have an impact on the use of tobacco by pregnant Aboriginal women. Through TDRS funding, the Society developed *The Smoke Free Journey Counselling Guide* (S16) which provides lay counsellors with information and skill development opportunities so that they can discuss tobacco reduction options with Aboriginal women during pregnancy. The guide incorporates solution-focused counselling approaches and teachings from the Medicine Wheel and Sacred Tree to make pre-existing tobacco reduction resources more useful for Aboriginal women. A set of three culturally relevant posters were also developed to raise awareness among pregnant women and their families.

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Cessation support

FOR YOUNG pregnant women

The service providers in the Young Single Parents Support Network in Ottawa had noticed that many of the young women using their services were smokers. When they tried to find a smoking cessation program for the group, nothing existed that combined the concerns of youth with the concerns of pregnancy and single parenthood. With TDRS funding, the Network developed a new, bilingual program *Kick Butt for Two* (K2). *Kick Butt for Two* is a facilitated support group program that is delivered in eight sessions. While it encourages participants to quit smoking, it also identifies reducing the amount smoked and making other personal lifestyle changes as program goals. The program design is flexible so that participants can select the topics they want to discuss rather than follow a prescribed program. A key lesson from *Kick Butt for Two* is that young pregnant women and young single parents need an opportunity to talk about all the stresses in their lives – the stresses that they smoke to cope with – and that talking is an important part of moving toward reducing or quitting smoking.

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Lesson Two: Most women who quit smoking during pregnancy relapse after the baby is born.

1 Women who quit smoking while pregnant often experience postpartum relapse.

While most pregnant smokers are able to stop smoking at some point while planning to become pregnant or during the early stages of the pregnancy, many women find it difficult to stay quit. A pre-TDRS literature review found that approximately 60% of smokers who quit for part or all of their pregnancy start smoking again before their baby reaches six months of age (P3). This high rate of postpartum relapse means that the smoker's health is negatively affected and infants and children in the home are exposed to the negative health effects of environmental tobacco smoke.

2 The women's expectations and her family and friends contribute to the incidence of postpartum relapse.

Postpartum relapse occurs for a number of reasons. In some cases, women only intended to quit while pregnant and not for the long term. This perspective may be shared by the smoker's peer group of her partner, family and friends, all of whom may hold the expectation that she will resume smoking after her pregnancy, and all of whom usually continue to smoke throughout her pregnancy. In fact, ignoring the role the smoker's family and friends play in postpartum relapse may limit the effectiveness of interventions (E10).

3 TDRS research drew attention to and focused on the postpartum period.

Two university-based research projects were initiated under the TDRS. The School of Nursing and the Institute of Health Promotion Research in Vancouver tested a relapse prevention intervention which consisted of personal counselling in the hospital at the time of birth, and subsequent telephone sessions (E10). A total of 254 women participated in the study, which found that interventions can be effective in the postpartum period.

A second study, conducted by the Community Health Research Unit in Ottawa, included a qualitative study of 43 women concerning the situational factors that influence their decision to quit, stay quit or relapse during pregnancy and postpartum as well as a longitudinal study of 109 pregnant and 117 postnatal women to identify predictors of progression through various stages of readiness to stop smoking (R7). The qualitative study found that a woman's background, the extent of her addiction to nicotine, her self-identity as a smoker and her social network all need to be addressed if smoking interventions are to be successful. The longitudinal study found that pregnant women were more likely to be ready to take action on smoking than postpartum women and both groups were more likely to have quit for the baby than for themselves.

Dealing with POSTPARTUM RELAPSE

Recognizing that postpartum relapse is a frequent occurrence and a key issue in prenatal/postpartum smoking cessation initiatives, the TDRS included a major study on relapse, leading to the development of a new intervention, *Start Quit, Stay Quit* (S17). The program is designed to be used during the prenatal period and starts preparing women right away for the likelihood of postpartum relapse and taking steps to prevent it.

The resource itself consists of two companion booklets, one for pregnant women and one for their partners. A workshop training format and a guide to increasing women's motivation are available for service providers, as are large posters to promote the program and recruit women for participation.

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Lesson Three: A variety of ways of increasing program effectiveness has been implemented.

1 Prior to the TDRS, most tobacco reduction programs for pregnant and postpartum women were imported from other countries.

A 1996 listing of tobacco use cessation programs available in Canada listed six programs for pregnant women (T5). Of these six, four were either American or adapted from American programs. While all of these resources were developed to address the unique aspects of quitting smoking during pregnancy, it was not known how well American programs actually fit the Canadian social and cultural context. The exceptions were two new programs developed under the Ontario Tobacco Strategy (S13, U1) but these programs were not widely disseminated outside Ontario.

2 Under the TDRS, new tobacco reduction programs for pregnant and postpartum women have been based on women's different stages of readiness to quit.

Only one of the tobacco cessation programs for pregnant women used in Canada prior to the TDRS used the Stages of Change Model as its foundation (S13). The Stages of Change Model advocates viewing smoking cessation as a process or series of steps rather than a single event when a smoker actually quits. The model identifies five stages of behaviour change as a smoker gets ready to quit: thinking about quitting, deciding to quit, getting ready to quit, quitting, and staying quit. The model acknowledges the frequency with which relapse can occur in any of the stages and that relapse needs to be seen as a natural occurrence that is to be expected when a smoker is trying to quit.

Virtually all the prenatal and postpartum cessation programs developed under the TDRS have been informed by an understanding of the Stages of Change (B6, K2, R7, S13, S18, T12). This has led to a recognition that not all pregnant women feel ready to quit and that many need help in getting ready to quit during their pregnancy.

However, the application of the Stages of Change to prenatal programs has also raised some important questions. First, when applied to other smokers, the model allows smokers to take their time preparing to quit smoking and recognizes incremental steps such as reducing the amount smoked as progress. Prenatal programs often have the intended goal of reducing the harmful effects of tobacco use on the pregnant women and on the fetus. Consequently, women are encouraged to work toward quitting quickly. However, many pregnant women have been found to be in the pre-contemplation or contemplation stage and are not quite ready to quit (P3, R7). This suggests that they require adequate preparation time to be able to quit and stay quit. Using a more gradual, harm reduction approach may be more realistic for smokers but it prolongs fetal exposure to tobacco smoke.

3 New programs to address postpartum relapse were developed.

Prior to the TDRS, there were few postpartum supports available for women who quit smoking during pregnancy. A specific focus on postpartum issues during the TDRS has helped to address this gap.

The University of British Columbia School of Nursing (E10) developed a resource package including pamphlets outlining the risks of postpartum smoking and strategies to deal with cravings and the effects of ETS on children, a self-help card on handling high-risk situations and turning slips into positive experiences, and materials designed to help create a smoke free home (e.g. signs for homes and cars). The program was delivered by nurses who initially met women in the hospital at the time of the baby's birth. This meeting was followed by a series of eight phone calls that occurred weekly during the first month postpartum and biweekly during the second and third months.

Start Quit, Stay Quit (S17) was tested with pregnant women and their partners to prevent postpartum relapse. Other programs incorporate postpartum relapse into prenatal initiatives (K2, S13, U1) and train service providers to be able to provide effective counselling for postpartum smokers (A2, S17, T12).

4 There is now a greater range of tobacco reduction programs that have been designed for pregnant women.

Through national and community-based programs, Canadian women now have increased access to several different prenatal tobacco reduction programs:

- *Stopping When You're Ready* (S13), a cessation kit of five booklets designed for each of the Stages of Change, is available nationally.
- A kit for Francophone women, *Une grossesse sans tabac* (U1), has been expanded based on the Stages of Change.
- The Lung Association of Newfoundland and Labrador has produced *Baby's Coming, Baby's Home* (B6) to help pregnant women quit smoking and make their home smoke free.
- *Kick Butt for Two* (K2) is a group support program for pregnant teens and young single parents that helps them address tobacco use and the concerns of being a new parent.
- *The Smoke Free Journey Counselling Guide* (S16) provides a tobacco reduction counselling program that is culturally relevant for pregnant Aboriginal women.

5 Few programs have been designed for specific cultural and linguistic groups.

Under the TDRS, two prenatal resources were developed specifically for individual cultural and linguistic groups – *Une grossesse sans tabac* for Francophone women (U1) and *The Smoke Free Journey Counselling Guide* for Aboriginal women (S16). Since smoking prevalence rates are higher among Francophone and Aboriginal women than other groups of women, it is probable that smoking during pregnancy is also more prevalent. Aboriginal and Francophone women need access to a range of program options during pregnancy that are currently unavailable to them.

Cultural differences may have less to do with the content of a program than in the way the program is delivered. The Francophone women who participated in the evaluation of the *Une grossesse sans tabac* program received a face-to-face counselling session with a public health nurse that lasted from 15 to 30 minutes, a copy of the written resource, and three follow-up phone calls. They indicated that they enjoyed the initial face-to-face counselling session but found the telephone calls less helpful and they missed the human contact of a visit by the public health nurse. This suggests that Francophone women may benefit from in-person contacts more than from less personal approaches such as phone calls or mail.

The Smoke Free Journey program for Aboriginal women did not develop a specific resource for women. Instead, it concentrated on developing a guide for lay counsellors so that they could deliver effective face-to-face counselling. This is based on a cultural preference for talking over reading.

6 Effective strategies for recruiting women to interventions have been identified.

Recruitment to programs that are specifically designed to help women quit smoking during pregnancy has traditionally been difficult. Programs have been plagued by low attendance, women who indicate they will attend but don't and high drop-out rates once the programs are under way. TDRS research found that recruiting women for interventions through physicians and their office staff is not the most effective way of reaching women (R7, U1). Advertising a postpartum relapse program and expecting women to see it as something they need does not work because smokers who have quit underestimate their risk of relapse.

Based on the experience of TDRS research projects, the recruitment strategies that reached the greatest number of eligible women and had the highest response rate involved recruitment by a public health nurse sitting in doctors' offices and talking with women as they arrived for their appointments (R7) and a nurse meeting directly with women in the hospital when

they delivered their baby (E10). Programs that already work with pregnant women in group settings also found it possible to offer programs that specifically address smoking (K2). Other programs that traditionally worked with pregnant women on health issues found that incorporating discussions on smoking into their traditional prenatal interventions on a one-to-one basis was more feasible for their organization than trying to run a separate group on smoking (B6, T12, U1).

7 Greater insight into what makes interventions work was gained.

TDRS research found that a high sense of self-efficacy toward smoking cessation, a perception that smoking during pregnancy puts one at risk, and the intention to breastfeed are predictors of positive movement through the Stages of Change and staying quit (R7). A second study found that a postpartum intervention was most effective for women who had confidence that they could resist temptations to smoke in social situations, had not made repeated quit attempts and were not exposed to smoking among the majority of their family and friends (E10).

Partner support is an important factor in prenatal cessation and preventing postpartum relapse. Positive support from a partner, whether the partner smokes or not, helps pregnant women to quit smoking and to resist postpartum relapse (P3, R7).

A staged approach TO QUITTING FOR PREGNANT WOMEN

Stopping when you're ready (S13) is a staged self-help approach to smoking cessation for pregnant women. The resource consists of a kit folder containing five booklets, each one developed for one of the five Stages of Change. A brief quiz at the start of the kit helps women identify their stage and find the right booklet. The contents of the booklets include quizzes, self-awareness exercises, different techniques for getting ready to quit, advice for handling other smokers and getting support, and specific information related to smoking and pregnancy. Many of the booklets have inserts that can be pulled out and used as needed.

Originally developed by the Community Health Research Unit at the University of Ottawa with funding from the Ontario Ministry of Health, the resource was redesigned, given new illustrations and made available at a national level under the TDRS. The resource has been used extensively in health departments in Ontario as well as in TDRS community projects, either in its original form or as background for new resources. The resource is well received by service providers and prenatal women, and, in self-help form, is best suited for women who read well.

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Working with PRENATAL FRANCOPHONE WOMEN

In 1993, a smoking cessation self-help kit for pregnant Francophone women, *Une grossesse sans tabac* (U1), was developed in association with *Stopping when you're ready* (S13). While it is not merely a translation, *Une grossesse sans tabac* matches *Stopping when you're ready* in terms of content and approach, consisting of an introductory quiz, five stage-based booklets, and inserts in the booklets.

Under the TDRS, the resource was expanded to include a stage-based approach and test the resource with intended users. The evaluation, conducted with 14 women, found that the booklets helped them to reduce or quit smoking. As well, they shared the booklets with their partners and other family members. The women were most likely to use the resources during their pregnancy than in the postpartum period, even though a postpartum resource is included in the kit.

Lesson Four: Service providers feel most effective with adequate training and support.

1 At the outset of the TDRS, service providers indicated that they did not feel confident about counselling pregnant women on tobacco use issues.

A wide range of service providers may come into contact with women during the prenatal and postpartum periods. These service providers include public health and community health nurses, hospitals, physicians, community health organizations and social service agencies. During the initial stages of the TDRS, the training and support needs of these service providers were assessed with the goal of helping them in their work with prenatal and postpartum women who smoke (B6, T2d, T12).

The service providers who are in a position to offer cessation support to pregnant smokers feel that they need more training so that they can give that support. A needs assessment of 66 providers of prenatal and postpartum services (S14) found that only 25% of the respondents had received any general smoking cessation training and none had received training specific to smoking cessation with pregnant or postpartum women. Less than half of the respondents (44.1%) felt that they had the skills to motivate pregnant and postpartum women to quit smoking. Few of the prenatal and postpartum providers felt confident about counselling pregnant smokers on cessation, let alone actively address postpartum relapse.

2 Service providers identified specific knowledge and skill building needs related to smoking cessation in the prenatal and postpartum period.

Service providers cited a lack of resources addressing smoking during pregnancy, inappropriate materials and a lack of appropriate programs for referrals as barriers to effectively working with prenatal and postpartum women who smoke (T2d, B6). Service providers felt that they needed training in applying a staged approach to smoking cessation, preventing postpartum relapse, and identifying and overcoming barriers to smoking cessation (S14, T12).

Service providers identified the need for concrete and specific help to assess and counsel pregnant smokers (S14). The type of help needed included:

- comprehensive and informative approaches to assessing a pregnant woman's smoking history;
- suggestions for what to ask and what to advise when working with pregnant smokers;
- training for using current approaches to prenatal and postpartum smoking cessation interventions; and
- techniques for supporting women who have already quit during pregnancy to remain quit in the postpartum period.

3 New insight has been gained about the steps that service providers can take to help pregnant and postpartum women reach their non-smoking goals.

Several research projects related to pregnant and postpartum women were conducted under the TDRS (B6, E10, P8, R7, S4, T12, U1). When combined, the results of these research projects provide greater understanding of the smoking and quitting behaviours and motivations of pregnant and postpartum women. This knowledge translates into improved actions and interventions by service providers.

An important lesson gained from the research is that improving smoking assessment tools helps service providers to become more client-centred in their interventions and helps them decide the best ways to support individual clients (R7). Typically, service providers first encounter pregnant women due to their pregnancy and not due to smoking. Initial assessment tools that incorporate questions about smoking can help the service provider to give appropriate advice and information and begin to work with the individual woman toward reducing her baby's exposure to tobacco.

TDRS prenatal and postpartum projects also shed light on how to apply the Stages of Change Model as well as why and how it works (R7, T12, U1). Research conducted on the Stages of Change Model during the TDRS found that a high degree of self-efficacy helped women move through the stages and stay quit (R7). Helping women assess their self-efficacy (i.e. their confidence in their ability to make a change and handle difficult situations) seems to be an important way of helping women to quit and stay quit. As a result, a tool has been developed to help women assess their self-efficacy in situations where they will be at risk of smoking (R7). The tool forms the basis for counselling and discussion between the practitioner and the woman and can be used in any program that specifically works with smoking mothers.

Asking clients about their intentions to stay quit postpartum is an effective way for service providers to work toward preventing postpartum relapse. Working on three predictors of relapse – risk perception, self-efficacy and partner support – also contributes to preventing postpartum relapse (R7).

4 New training resources and approaches were developed for service providers.

An important legacy of the TDRS is the foundation of solid training and support for service providers that has been developed. An important first step consisted of documenting and summarizing the literature on the health effects of environmental tobacco smoke for infants and children, and the programs and resource materials available to service providers (E11, P3, T2). This provided a base of factual information upon which to build programs and interventions.

A wide selection of training resources and approaches were developed, ranging from one-page instruction sheets, to self-training videos with guides, to intensive two-day workshops. The training resources for prenatal and postpartum service providers developed under the TDRS include:

- The *Smoke Free Journey Counselling Guide* (S16), *Kick Butt for Two* (K2) and *Baby's Coming, Baby's Home* (B6) projects each developed manuals for service providers so that they could train themselves to use the program resources, counsel pregnant and postpartum smokers, and facilitate cessation groups.
- A training video and workbook, *Asking to Listen*, were developed to help service providers understand and apply a staged approach to cessation intervention and improve their counselling skills (A2).
- *Towards Healthy Family Breathing* (T12) developed and piloted an interactive workshop format for training perinatal health care workers. The workshop was designed to look at caregivers' personal attitudes toward smoking and their level of motivation for addressing the issue with pregnant smokers, increase their knowledge of the Stages of Change Model while increasing their confidence in using the approach, and provide them with practical information on how to obtain available resources.
- The University of British Columbia School of Nursing (E10) developed a training program for nurses so that they could implement a face-to-face, in-hospital counselling session and follow-up telephone counselling and support to prevent postpartum relapse.

A Getting Started Kit

FOR SERVICE PROVIDERS

One of Health Canada's first steps under the TDRS was to gather recent and ongoing work concerning pregnant and postpartum women and pull it together into a useful format for service providers. The resulting *Tobacco Free Booklets for Prenatal and Postpartum Providers* (T2) consists of six individual booklets that give service providers access to the facts on smoking in pregnancy, information on available motivational and cessation resources and how to obtain copies, and an opportunity to reflect on their personal experiences and work related to smoking cessation with pregnant and postpartum women.

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- The Community Health Research Unit at the University of Ottawa (P8) developed a two-day training workshop to train health care workers to understand and apply the Stages of Change Model in relation to smoking relapse among pregnant and postpartum women. The training used case studies and role plays to help participants develop the skills needed to use the *Start Quit, Stay Quit* (S17) program in individual and group settings.
- The *Smoke Free Environments for Everyone* project (S18) trained health and social service staff to provide smoking cessation support for pregnant teens using a self-help resource.
- The Council for a Tobacco-Free Region of Peel developed simple, one-page “guides” to accompany a humourous, seven-minute video on smoke free homes (T11). The guides help public health nurses introduce the topic of ETS and show clients how to create smoke free homes.
- The Program Training and Consultation Centre in Ottawa sent resource people to Ontario health departments for three- to five-day training and consultation sessions that tailored prenatal and postpartum smoking interventions to specific communities (E9).

Developing Listening

AND COUNSELLING SKILLS

Videos are a popular and effective addition or alternative to training workshops. *Asking to Listen* (A2) is an important addition to any training program for prenatal and postpartum smoking interventions. Consisting of a 35-minute video and a detailed guide, the resource provides comprehensive information on assessing a pregnant woman’s readiness to change her smoking behaviour and suggests appropriate types of support at each stage of readiness. It provides simple, factual information to answer service providers’ questions as well as those of their clients. And, most importantly, it encourages service providers to worry less about what to say by assuring them that listening is the best support they can offer a pregnant woman as she thinks about quitting.

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Lesson Five: Family approaches to creating smoke free environments for infants and children are needed.

1 Smoking during pregnancy and postpartum relapse are heavily influenced by the smoking behaviours of women's family and friends.

The key relationships in the lives of pregnant women who smoke are often with other smokers – partners, family and friends. Trying to quit makes them doubly different from their peers – they are pregnant and they are trying to stop smoking. Time and again, TDRS projects found that being surrounded by partners, extended families and friends who smoked had a powerful impact on pregnant and postpartum women in terms of the extent to which they were able to reduce or quit smoking and the likelihood of relapse (E10, P3, P8, R7, S4, T2).

For many women, being alone in trying to change their smoking behaviour while surrounded by other smokers who are not making any changes negatively affects their ability to succeed. An important lesson learned from the TDRS is that effective interventions in the prenatal and postpartum period need to reach all smokers in an individual household, not just the pregnant or postpartum woman (E10, P8, R7).

2 Greater emphasis should be placed on programs that foster smoke free families and homes.

The *Survey of Smoking in Canada* found that 32% of all Canadian women had smoked or were exposed to their partners' smoke during their most recent pregnancy and 74% of women who currently smoke either smoked or were exposed to partners' smoke during their most recent pregnancy (S8). Through focus group research, several TDRS projects discovered that, while most women were aware of the potential negative health effects on the fetus from maternal smoking, many women were less aware of the impact of environmental tobacco smoke (ETS) on the fetus, infants and young children (B6, S18, T11). Smokers and individuals from households with smokers consistently demonstrate a lower awareness of the health effects of exposure to ETS (A3, E1). This suggests a need to develop approaches that reach all adults and smokers living in individual households.

TDRS work found that the majority of adults favour placing some restrictions on the places where smokers may smoke when it is for the benefit of children's health (A3, E1, E2, E11). This suggests that ETS-related educational efforts directed toward all adult smokers and focusing on the impact on children have the potential to be effective.

Many prenatal smoking interventions include information on ETS and ways in which pregnant women can make their homes smoke free (K2, S13, U1). Although women tend to be the primary initiators of smoke free policies in their homes (R7), care must be taken not to add to their pressures or guilt by adopting strategies that seem to make women solely responsible for creating smoke free homes. Programs that focus on the whole family may reduce the guilt women feel when they are singled out to quit because they are pregnant, emphasize the shared responsibility of all smokers in a household, and provide an opportunity for children to be involved.

3 New programs that help families develop a smoke free home have been developed.

Through TDRS funding, many communities and organizations developed new programs and resources that take a family- or couple-centred approach to ETS education and awareness building. The types of programs developed include:

- The Council for a Tobacco-Free Peel Region developed a short video, pamphlet and fridge magnet that speak from a baby's perspective on the ways tobacco smoke affects her and addresses both parents through the slogan and title *Thanks Mommy and Daddy for a Smoke Free Home* (T11);

- *Baby's Coming, Baby's Home* (B6) consists of a brief video and support material that help families make their homes smoke free before the arrival of a new baby;
- *Start Quit, Stay Quit* (S17) is a couple's approach to becoming smoke free that provides practical advice for both the pregnant woman and expectant father as they work together on quitting smoking and keeping their home smoke free;
- The Physicians for a Smoke Free Canada's *Take It Outside* campaign (T1) uses a wide range of media, including displays on city buses, to encourage all smokers not to smoke in their homes and keep tobacco smoke away from children;
- Through *Helping Our Kids Breathe Easy* (H2), the Canadian Institute of Child Health provides community organizations with step-by-step support for launching a public education effort to reduce children's exposure to ETS;
- The *Smoke Free Spaces for the Little Reasons* campaign in the Gabriel Springs Health District of Saskatchewan (E11) includes a variety of resources and activities to educate the community about the health effects of ETS and encourages smokers not to smoke around children and pregnant women; and
- Health Canada distributed the mini-magazine *Smoke Gets in Your Eyes* (S3) through popular magazines such as *Canadian Living*. The magazine featured articles on the impact of ETS on the fetus, small children and other age groups.

Creating Smoke Free ENVIRONMENTS for babies

The Community Health Program, St. Johns Region and the Newfoundland and Labrador Lung Association shared a concern about the extent to which new babies were exposed to environmental tobacco smoke. They decided to work together to help prenatal and postpartum women create smoke free environments for their babies. The result is *Baby's Coming, Baby's Home* (B6), a 10-minute video and support materials.

The project also provided training for resource people who work with prenatal and postpartum women. After receiving the training, resource people use the video in a one-to-one or group setting. The video itself, which is accompanied by a discussion guide for the resource person, tells one woman's story about her first pregnancy and her efforts to make her home smoke free during her second pregnancy. Support materials include household visual cues such as a door knob hanger and decals. Both the video and the training provided for resource people are appropriate to work with women living on low incomes or with low literacy skills.

Key Elements IN A COMMUNITY CAMPAIGN

When the Saskatchewan Institute on Prevention of Handicaps approached the Gabriel Springs Health District about piloting a community environmental tobacco smoke (ETS) awareness campaign, they knew that they had to find several ways to get their message across and involve the community in developing the campaign. The result was the *Smoke Free Spaces for the Little Reasons* campaign (E11). By field testing all materials, including the slogan, logo, posters and pamphlets, the campaign organizers were able to raise community awareness about ETS before actually launching the campaign!

To encourage community residents to commit to not smoking around children and pregnant women, a contract and prize draw contest was developed. Smokers who signed the contract agreeing not to smoke around children and pregnant women were entered into a draw for several prizes donated through community businesses – a $500 shopping spree for the under 18 entrants and a family weekend at the Fantasyland Hotel in the West Edmonton Mall for the adult entrants.

Other resources developed for a provincial campaign included a poster and brochure for pregnant women "You can already see his feet, his hands...but can you see the effects of smoking?", a poster and brochure for the general public "She needs to breathe more than you need to smoke" and an information booklet *Tobacco Smoke: The Risk to Unborn Babies, Pregnant Women and Children.*

For more information ON TOBACCO CONTROL:

Health Canada's website: www.hc-sc.gc.ca/hppb/tobaccoreduction

Canadian Council for Tobacco Control's website: www.cctc.ca

Quit 4 Life website: www.quit4life.com

TDRS
DOCUMENT CODES

The TDRS, in association with a range of partners, produced hundreds of reports, resources and papers. This section provides a brief description of each resource referenced in the summary. Information for finding out more about the project or ordering a resource is included, when available. Other items may be borrowed through interlibrary loan from the Departmental Library, Dept. of Health Canada. Please contact your public or institutional library to make arrangements for any such loans.The majority of the projects were conducted under the TDRS. Documents from projects that were initiated prior to the TDRS are denoted by an asterisk (*).

A2 Asking to Listen. Resources for perinatal providers. 1997, English and French.

This 35-minute video and facilitator's guide is designed for service providers who work with pregnant and postpartum women. The resource provides training on effective counselling techniques for discussing tobacco use.

Canadian Public Health Association
400-1565 Carling Avenue
Ottawa, ON K1Z 8R1
Phone: 613-725-3769 Fax: 613-725-9826
e-mail: hrc/cds@cpha.ca

A3 An Assessment of Knowledge, Attitudes and Practices Concerning Environmental Tobacco Smoke. 1995, English.

Unpublished research report on a survey of 2300 parents of children aged 12 years and younger and 700 extended family members. The study also conducted 10 focus groups across the country with children 8 to 10 years and 10 with children 11 to 12 years. A summary document is available: see E1.

A4 Assessment of Child Care Provider's Knowledge, Attitudes and Practices Towards ETS. 1995, English.

Unpublished research report on a survey of 3,695 individuals providing child care in licensed centres, regulated home care, unlicensed home care, and other settings. In addition, focus groups were conducted with child care providers in six cities. A summary document is available: see E1.

B6 Baby's Coming, Baby's Home. 1997, English.

This program is designed to help prenatal and postpartum mothers and their families to create smoke free environments for their babies. Resources include a 10-minute video, a discussion guide, a door knob hanger, a decal and an evaluation report.

E1 Environmental Tobacco Smoke: Knowledge, Attitudes and Actions of Parents, Children, and Child Care Providers. 1995, English and French.

Presents key information from a study of the knowledge of and attitudes toward ETS by parents, extended family and children as well as a study of child care providers. A summary report of two larger studies: see A3 and A4.

Publications Unit, Health Canada
Phone: 613-954-5995 Fax: 613-941-5366

E2 Environmental Tobacco Smoke (ETS) in Home Environments. 1996, English and French.

Reviews the current knowledge concerning ETS exposure in home environments, provides examples of current activities to control ETS in home environments, suggests options and strategic activities to reduce ETS exposure, and assesses the impact and future directions for policy and program development.

E9 Evaluation Report 1996/97. Program Training and Consultation Centre. 1997, English.

The PTCC, a training and support resource centre for the Ontario Tobacco Strategy, used TDRS funding to expand its services with often under-served francophone and northern communities in Ontario. The PTCC sent tobacco consultants to local communities for 71 on-site consultations.

E10 Evaluation of a Smoking Relapse Prevention Intervention for Postpartum Women. 1997, English.

Nurses were trained to provide in-hospital counselling on postpartum smoking relapse to new mothers at the time of birth. Of the 254 women who participated, 60% of the women who received the intervention reported postpartum smoking compared to 71.4% of the women who had not received the intervention.

E11 Environmental Tobacco Smoke: Effects on Children's Health Before and After Birth. 1997, English.

This project raised the awareness of the general public, parents, caregivers and pregnant women about the adverse health effects of ETS. The project produced a final report, posters, an information package and booklet, and a fact sheet.

H2 Helping Our Kids Breathe Easy: A Community Guide to Reduce Exposure to Environmental Tobacco Smoke. 1997, English and French.

A guide for parents, caregivers, teachers, doctors, etc. who want to create smoke free homes for children. A resource book provides how-to information for a public education campaign, a community action program and a one-on-one approach with people who smoke. A WordPerfect computer disk version is available.

Canadian Institute of Child Health
885 Meadowlands Drive East, Suite 512
Ottawa, ON K2C 3N2
Phone: 613-224-4144 Fax: 613-224-4145

K2 Kick Butt for Two. 1997, English and French.

The project developed a smoking reduction and cessation group support program for pregnant teens and young single parents aged 14 to 24. A facilitator's guide and evaluation report are available.

Young Single Parents Network
659 Church Street
Ottawa, Ontario K1K 3K1
Phone: 613-749-4584 Fax: 613-749-7018

P3 Pre and Postnatal Smoking: A Review of the Literature.* 1994, English and French.

A comprehensive review of the literature on the health effects on the fetus of exposure to tobacco smoke, the health effects on the infant and child of exposure to ETS, trends and prevalence of maternal smoking during pregnancy, post-partum relapse, smoking cessation programs for pregnant women, and recommendations for research, program and policy development. This document is summarized in the *Tobacco-Free Booklets for Prenatal and Postpartum Providers* series (See T2c).

Website: www.uottawa.ca/academic/med/epid/chru.html

P8 Preventing Smoking Relapse Postpartum: Pilot Studies in Calgary and Nova Scotia.1997, English.

Unpublished research report. Training workshops were offered to practitioners and a smoking relapse prevention intervention was implemented with pregnant and postpartum women to prevent postpartum smoking relapse.

R7 Reducing Smoking Relapse During Pregnancy and Postpartum of Women and Their Partners. 1997, English.

A summary of the objectives, methods, results and conclusions of a three-phase project addressing smoking and smoking relapse among pregnant and postpartum women. Pilot tested the *Start Quit, Stay Quit* intervention: see S17.

S3 Smoke Gets in Your Eyes. 1995, English and French.

A small magazine consisting of several articles that raise awareness about smoke-free environments for families and present factual information on the effects of environmental tobacco smoke.

Website: www.hc-sc.gc.ca/hppb/tobaccoreduction

S4 Smoking and High Risk Pregnant Women. 1996, English and French.

A literature review defining the concept of "hard-to-reach" and identifying the factors associated with smoking during pregnancy, cessation interventions and recruitment strategies for hard-to-reach pregnant smokers.

Publications Unit, Health Canada
Phone: 613-954-5995 Fax: 613-941-5366
Website: www.hc-sc.gc.ca/hppb/tobaccoreduction

S8 Survey of Smoking in Canada, Cycles 1–4. 1995, English and French.

Modified longitudinal national survey that collected information on roughly 15,800 Canadians 15 years of age and older at four intervals during a one year time frame.

Publications Unit, Health Canada
Phone: 613-954-5995 Fax: 613-941-5366

S13 Stopping When You're Ready.* 1994, 1996, English.

A self-help smoking cessation kit for pregnant women who smoke. The kit includes five booklets based on the Stages of Change, as well as a number of inserts for each booklet. Women choose the appropriate booklet for the stage based on an introductory quiz. Master copies are available for groups that wish to print or photocopy large quantities.

Cambium Consulting
3054 Klondike Road
North Gower, ON K0A 2T0
Phone: 613-489-1999 Fax: 613-489-2777

S14 Smoking Cessation Training Resource for Prenatal and Postpartum Providers: Needs Assessment Final Report. 1995, English.

Assesses the need for a smoking cessation training resource for prenatal and postpartum service providers and identifies the type of information and resource desired by the service providers. Presents the results of a written survey from 40 respondents, interviews with 26 experts, a document review and a review of training resources.

S16 The Smoke Free Journey Counselling Guide. 1997, English.

Provides lay counsellors with information and skill development activities so that they can discuss tobacco reduction options with Aboriginal women during pregnancy. Resources consist of a final report, a self-training manual for counsellors and posters.

Northern Family Health Society
1010B - 4th Avenue
Prince George, BC V2L 3J1
Phone: 250-561-2689 Fax: 250-562-2592

S17 Start Quit, Stay Quit. 1997, English.

A couple's approach to reducing postpartum smoking relapse, the resource consists of two matching booklets, one for women and one for their partners. The resource has been used in research and pilot tests: see P8 and R7.

Community Health Research Unit
University of Ottawa
Dept. of Epidemiology and Community Medicine
451 Smyth Road
Ottawa, ON K1H 8M5
Phone: 613-562-5800, ext. 8262
Website: www.uottawa.ca/academic/med/epid/chru.html

S18 Smoke Free Environments for Everyone. 1997, English.

The project used a self-help cessation package to work on reducing smoking among pregnant teens and their families. The project found that smoking cessation is not a high priority for pregnant teens but it raised their awareness of the health effects of tobacco use and increased the knowledge and confidence of staff working with pregnant teens.

T1 Take It Outside. 1996, English and French.

A media campaign to encourage physicians to be more active in promoting smoke free spaces for children, increase media awareness, increase parental knowledge and motivate parents to have smoke free homes. Campaign included print ads, transit ads for buses and TV spots, all designed to surprise smokers into paying attention, give a non-judgmental message and encourage smokers to smoke outside.

Physicians for a Smoke Free Canada
PO Box 4849, Station E, Ottawa, ON K1S 5J1
Phone: 613-233-4878 Fax: 613-567-2730
Website: www.smoke free.ca

T2 Tobacco-Free Booklets for Prenatal and Postpartum Providers (6) A–F. 1995, English and French.

A series of six booklets designed for health professionals and service providers summarizing key information about smoking in the prenatal period. Individual titles in the series include:
a. Smoking and Pregnancy: A Woman's Dilemma.
b. Tobacco Resource Material for Prenatal and Postpartum Providers: A Selected Inventory.
c. The Effects of Tobacco and Second-Hand Smoke in the Prenatal and Postpartum Periods: A Summary of the Literature.*
d. Tobacco Reduction in Prenatal and Postpartum Programs for High-Priority Families: Results of a Cross-Canada Survey.
e. Smoking Interventions in the Prenatal and Postpartum Periods.
f. Smoking and Pregnancy: Selected Program Profiles
*Item "c" is a summary of P3.

Publications Unit, Health Canada
Phone: 613-954-5995 Fax: 613-941-5366

T5 Tobacco Use and Cessation Programs: An Inventory of Self-Help and Group Programs. 1997, English and French.

An update of a 1996 print version of the inventory, the 1997 version is available only on the Health Canada website.

Website: www.hc-sc.gc.ca/hppb/tobaccoreduction

T11 Thanks Mommy and Daddy for a Smoke free Home. 1997, English.

A program to encourage expectant parents to make their homes smoke free. The project produced a seven-minute video *Look Who's Coming to Dinner*, a pamphlet *Making Your Home Smoke Free*, fridge magnets, and a final report.

T12 Towards Healthy Family Breathing. 1997, English.

A training project to help perinatal workers address smoking issues with their pregnant clients. Workers were trained in the five Stages of Change and used the resource *Stopping When You're Ready*. Resources consist of T-shirts and pins.

U1 Une grossesse sans tabac. 1997, French.

An evaluation of a smoking cessation self-help program for pregnant Francophone women. The program is based on the five Stages of Change Model.