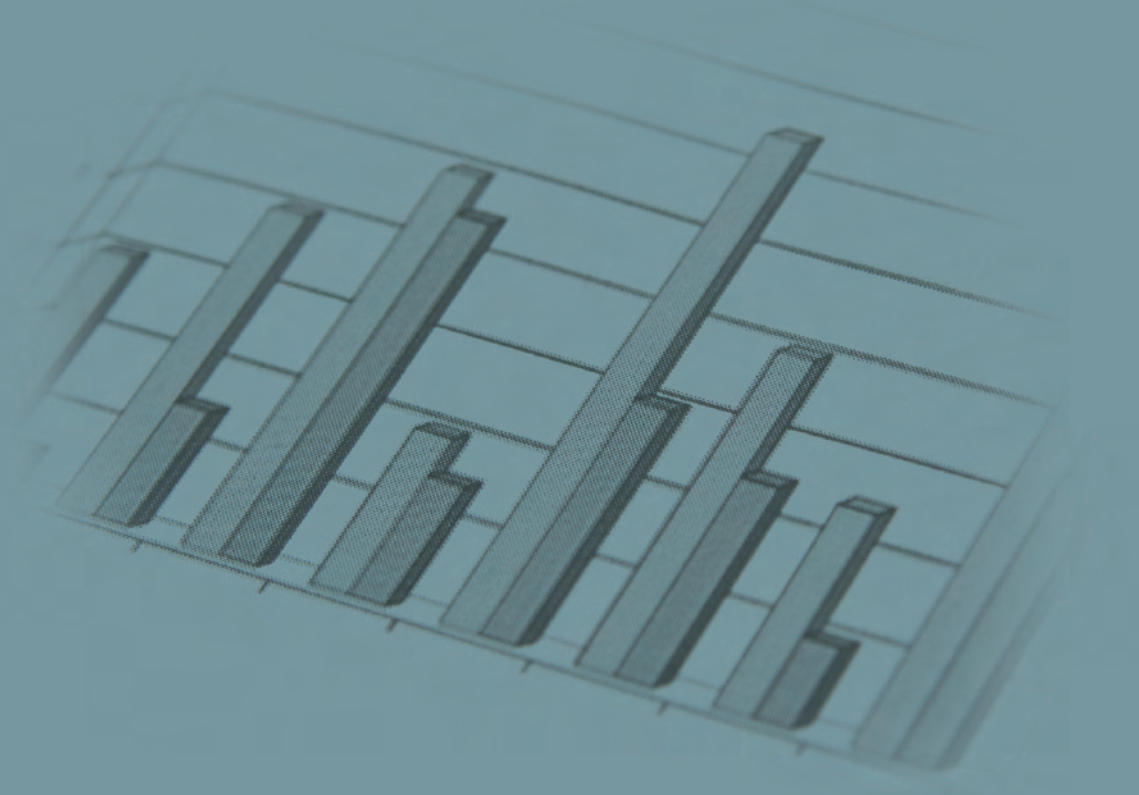


# Preconception Health:

## Public Health Initiatives in Ontario



*best start*  
*meilleur départ*

by/par health *nexus* santé



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Best Start Resource Centre supports service providers across Ontario through consultation, training and resources, in the areas of preconception, prenatal and child health. Best Start is a key program of Health Nexus. For more information about the Best Start Resource Centre, contact:

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# 1. Introduction

## 1.1 Purpose



This report shares information from public health departments across Ontario. The survey results provide the opportunity to examine trends in public health preconception initiatives over the last 5 years, to learn from the experiences of individual public health departments, and to examine their needs and challenges related to preconception health services. The report shares survey highlights, detailed survey results, discusses the context of the information and makes recommendations relevant to local and provincial preconception initiatives. This report will help service providers to consider new preconception health strategies, and to strengthen existing services.

This is the second in a series of 3 reports on preconception health in Ontario, available at [www.beststart.org](http://www.beststart.org). In addition to this report, Best Start Resource Centre has completed a survey of awareness and behaviours of men and women of childbearing age and, in collaboration with Motherisk, a survey of family physician preconception awareness and practices:

- Preconception Health: Awareness and Behaviours in Ontario (2009)
- Preconception Health: Physician Practices in Ontario (2009)

## 1.2 Preconception Health

Preconception health promotion is a prevention strategy that helps men and women to prepare for pregnancy by improving their health prior to conception. It includes health practices related to safeguarding fertility, preparing for pregnancy, and identifying and addressing risk factors. It also enhances pregnancy outcomes by optimizing health in the critical first weeks of pregnancy, before many women know they are pregnant. Preconception health strategies encourage men and women to actively plan their pregnancy, seek out health information and advice, and to make health changes prior to conception (Best Start Resource Centre, 2001). Preconception health strategies include aspects related to awareness, knowledge, skills, motivation, opportunity, access, supportive environments, policy development, and ultimately, behaviour change (Alberta Perinatal Health Program, 2007).

The general public understands that a woman's health during pregnancy can impact the health of her unborn baby, but is less aware of the importance of good health for both men and women prior to conception. The concept of actively preparing for pregnancy prior to conception continues to be a challenge for many Ontarians.

Over the last 10 years, there have been significant efforts to introduce preconception initiatives across Ontario. Public health units, in particular, have planned a range of strategies including awareness campaigns, web-based information, preconception classes and media strategies to encourage men and women to plan their pregnancies, assess their health and make appropriate changes, prior to conception. Province-wide preconception strategies include:

- ✓ Release of service provider manual “Preconception Health: Research and Strategies” in 2001 (Best Start Resource Centre)
- ✓ Release of a range of provincial preconception resources for the general public in 2001-2003 including a workbook, display, poster and brochure. These were later updated and released with new titles and graphics (Best Start Resource Centre, adapted from resources developed in collaboration by Simcoe District Health Unit and Best Start Barrie)
- ✓ Launch of “It's Never too Early” folic acid provincial awareness campaign in 2002 (Folic Acid Alliance Ontario)
- ✓ Launch of “Is there a Baby in your Future?” provincial awareness campaign in 2005 (Best Start Resource Centre)
- ✓ Release of brochure “Men's Information - How to Build a Healthy Baby” in 2006 (Best Start Resource Centre)
- ✓ Availability of regional workshops, phone, email and onsite consultation services across Ontario from 2000 - 2008 (Best Start Resource Centre)



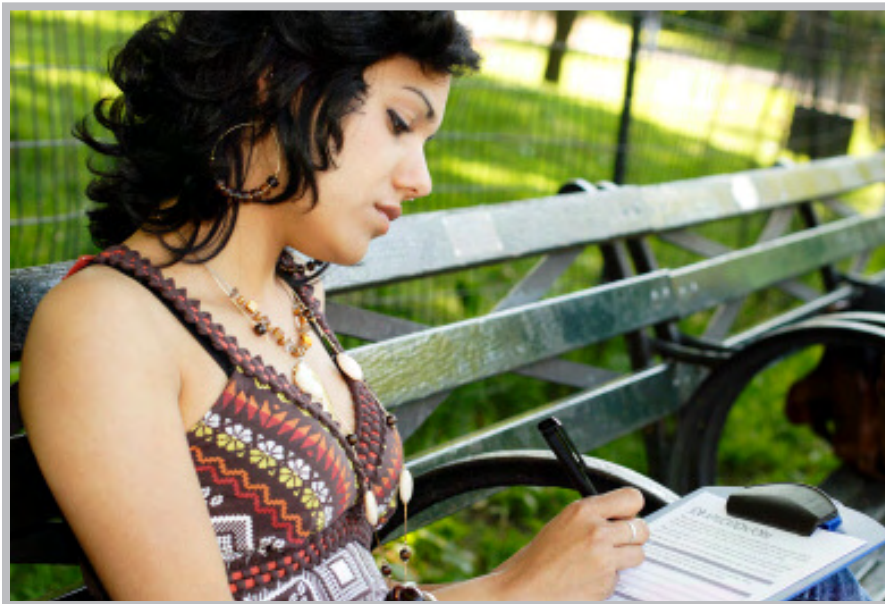
### 1.3 The Survey

To get a sense of preconception initiatives across Ontario, Best Start Resource Centre invited public health staff to participate in a survey. This scan was designed primarily as an on-line survey, and health units were offered the option of a fax back form. The survey included 12 questions about preconception initiatives. It was designed to take 5-15 minutes to complete, depending on the extent of local preconception initiatives.

The survey asked if the health unit had implemented preconception initiatives in the last 5 years, the type of preconception initiatives, the population of interest for the initiatives, the level of success of the initiatives, lessons learned, proposed new preconception initiatives, challenges in implementing preconception initiatives, and ways that Best Start Resource Centre could support development of preconception initiatives across Ontario.

Emails were sent to public health reproductive managers on October 20, 2008 to invite participation in the survey. One person per health unit (either the reproductive health manager or the person most involved in preconception initiatives) was asked to complete the survey. The exception was Toronto Public Health where all reproductive health managers (or a designated staff person) were invited to complete the survey. Reminder emails and phone calls were used to encourage participation.

Information was gathered through the online survey from October 20, 2008 to November 24, 2008. A small proportion of late responses were received by email and fax, up to February 2009.





Survey responses are presented in this report by geographic region, i.e. responses from individual health units are not identified in this report. Public health units were grouped in the following manner to examine geographic trends:

GTA	South east	South west	North
Durham Region Health Department	Eastern Ontario Health Unit	Brant County Health Unit	Algoma Public Health Unit
Halton Region Health Department	Hastings and Prince Edward Counties Health Unit	Chatham-Kent Health Unit	North Bay Parry Sound District Health Unit
Peel Public Health	Haliburton, Kawartha, Pine Ridge District Health Unit	City of Hamilton – Public Health & Social Services	Northwestern Health Unit
Toronto Public Health	Kingston, Frontenac and Lennox & Addington Health Unit	County of Lambton Community Health Services	Porcupine Health Unit
York Region Public Health Services	Leeds, Grenville and Lanark District Health Unit	Elgin-St. Thomas Health Unit	Sudbury & District Health Unit
	Ottawa Public Health	Grey Bruce Health Unit	Thunder Bay District Health Unit
	Peterborough County-City Health Unit	Haldimand-Norfolk Health Unit	Timiskaming Health Unit
	Renfrew County and District Health Unit	Huron County Health Unit	
	Simcoe Muskoka District Health Unit	Middlesex-London Health Unit	
		Niagara Region Public Health Department	
		Oxford County Public Health & Emergency Services	
		Perth District Health Unit	
		Region of Waterloo, Public Health	
		Wellington-Dufferin-Guelph Health Unit	
		Windsor Essex County Health Unit	

**Note:** To maintain confidentiality of individual responses, health units that did not respond to the survey are included in this table.

Responses were received from 32 of the 36 Ontario health units, for a response rate of 89%. Where more than one response was received from a health unit, the data was combined and weighted as one response. To determine provincial and regional trends, the number of replies in a specific category was divided by the total number of responding health units for a specific geographic area.



Each geographic area was well represented in the survey results. All 5 health units in the GTA completed the survey. For the north, responses were received from 6 out of 7 health units. For the south east, responses were received from 8 out of 9 health units. For the south west, responses were received from 13 out of 15 health units.

### ***Limitations:***

This report has a few limitations:

- A small number of health units (4 out of 36) did not respond to the survey.
- Individuals who responded may not be aware of all preconception initiatives that had been undertaken by their health unit.
- The number and type of initiatives identified in this survey may under-represent actual public health initiatives.
- The survey did not ask if the initiatives were evaluated or how they were evaluated. Levels of perceived success may be based on staff impressions or more solid evidence.
- The survey was limited to public health departments and should not be considered a complete review of preconception strategies across Ontario.

### ***Please Note:***

Data categories in this report may add up to slightly over or slightly under 100%. This may be due to rounding, or because response categories for don't know/not sure/refused were not included in the data table.

## **1.4 Additional Resources**

This report discusses the data from a survey of public health preconception initiatives, and the implications to program practice; however it does not review foundational information on preconception health concerns and initiatives. In order to plan and implement effective preconception strategies, the reader may need additional information or resources, for example, information about preconception health risks, information concerning possible strategies or patient handouts. The reader is encouraged to use this report in conjunction with the other 2009 provincial preconception health reports (see Purpose) and the following Best Start Resource Centre resources:

- Preconception Health: Research and Strategies manual
- Is there a Baby in Your Future brochure, poster and display
- Is there a Baby in Your Future online workbook
- Is there a Baby in Your Future camera ready ads
- Men's Information: How to Build a Healthy Baby brochure
- Is there a Baby in Your Future campaign information, including media resources

These resources are available at: [www.beststart.org](http://www.beststart.org). Many are provided in both French and English. The direct links to the “Is there a Baby in Your Future” workbook are [www.healthbeforepregnancy.ca](http://www.healthbeforepregnancy.ca) and [www.sante-avant-grossesse.ca](http://www.sante-avant-grossesse.ca).

## 2. Survey Highlights

This section presents the survey highlights, while Section 3 explores the data in more detail.

### 2.1 Past Preconception Initiatives

- Most health units that responded to the survey (88%) identified that they had implemented preconception initiatives in the last 5 years.
- The most common preconception health initiatives implemented by public health in the past 5 years were resource distribution (75%), resource development (53%), information sessions (47%), awareness campaigns (47%), media strategies (44%) and displays (44%).
- The most frequent populations of interest for public health preconception initiatives over the last 5 years were women planning a pregnancy (78%), youth (59%), men planning a pregnancy (53%) and health care providers (44%).

### 2.2 Success of Past Initiatives

- On a scale where 1 is not successful and 5 is very successful, the average score for public health preconception initiatives over the last 5 years was 3.6.
- The most common preconception initiatives reported for health units for the last 5 years included high school curriculum supports and resources (14), awareness campaigns for the general public (14) and client resources (14).
- Preconception strategies for the general public that were most likely to be considered successful (i.e. average score of 4-5) included awareness campaigns, web based information, prenatal classes that included preconception clients, individual consultations and high school presentations. Strategies for health care providers that were most likely to be considered effective included campaigns and training events.
- Preconception strategies that were least likely to be considered successful (i.e. average score of 1-2) included preconception classes and preconception clinics.

### 2.3 Proposed Preconception Initiatives

- Some health units planned to maintain or update their existing preconception initiatives, and others had not yet defined their preconception initiatives for 2009. At the time of the survey, only 56% of health units were planning specific new preconception initiatives.
- The most common new preconception initiatives for public health included resource distribution (38%), resource development (22%), awareness campaigns (22%), media (22%) and research (22%).
- The most frequent populations of interest for proposed initiatives were women and men planning a pregnancy (59% and 53%, respectively). In comparison, men at risk of an unintended pregnancy were an infrequent choice as a population of interest (16%).

## 2.4 Challenges

- Preconception health is a broad topic, and influences many areas of public health. Internal collaboration is considered to be important. Information sharing between health units about what worked and what didn't is also considered to be critical.
- The majority of challenges in implementing preconception initiatives related to a shortage of available resources including staffing, funding and other competing priorities.
- There were also challenges in identifying strategies to reach specific populations, including populations with lower levels of interest in preconception health, individuals at risk of an unintended pregnancy and health care providers.
- Respondents talked about difficulties in presenting preconception health on its own, and the benefits of building preconception messages into existing initiatives such as early prenatal classes and prenatal health fairs.
- A small number of respondents mentioned the challenges of working in small communities where men and women may not want to identify that they are planning a pregnancy, as well as limited communication strategies and transportation.



## 2.5 Needs

- There was strong support for existing services provided by Best Start Resource Centre. Respondents indicated that these services played an important role in helping health units to provide effective local preconception services.
- The most frequent request from health units was for Best Start Resource Centre to continue to develop high quality preconception resources.
- There were many comments about the important role of campaigns developed by Best Start Resource Centre in providing consistent provincial messages and in supporting local initiatives.
- Respondents thought Best Start Resource Centre reports were very helpful. They identified the need for additional research to guide their work, as well as opportunities for training and consultation. Respondents wanted a better idea of client needs, preconception strategies that were successful in other communities and how to reach priority populations.

### 3. Survey Results

This section shares detailed survey results.

#### 3.1 Implementation of Preconception Initiatives

**Survey Question:** Has your health unit implemented preconception initiatives in the last 5 years?

	GTA	South east	South west	North	Ontario
Yes, we <b>have</b> worked on preconception initiatives in the past 5 years	60%	100%	85%	100%	88%
No, we <b>have not</b> worked on preconception initiatives in the past 5 years	40%	0%	15%	0%	12%

**Table 3.1:** Proportion of Health Units that Implemented Preconception Initiatives in Last 5 Years

**Trends:** Most health units in all geographic areas indicated that they had implemented preconception initiatives in the last 5 years. Health units from GTA and south west were less likely to identify health unit preconception initiatives implemented in the last 5 years.

*“It is important to the reproductive health team to collaborate with other health unit teams such as sexual health and chronic disease and injury prevention teams. There is significant overlap with priority populations between these teams and therefore multiple opportunities to advance awareness related to preconception health.”*

*“Preconception health is about more than planning a pregnancy. These concepts need to be articulated within the context healthy growth and development.”*

#### 3.2 Type of Initiatives

**Survey Question:** What type of preconception initiatives has your health unit implemented (check all that apply):

	GTA	South east	South west	North	Ontario
Resource development	40%	50%	69%	33%	53%
Resource distribution	60%	75%	77%	83%	75%
Information sessions	60%	50%	46%	33%	47%
Awareness campaigns	60%	50%	31%	67%	47%
Media (e.g. TV, newspapers, radio)	40%	50%	38%	50%	44%
Displays	40%	38%	62%	17%	44%
Research (i.e. literature review, survey, environmental scan)	40%	13%	31%	17%	25%
Other	40%	13%	23%	50%	28%

**Table 3.2:** Type of Preconception Initiatives (proportions based on health units that implemented preconception initiatives)



**Trends:** The most common preconception health initiatives implemented by public health were resource distribution (75%), resource development (53%), information sessions (47%), awareness campaigns (47%), media strategies (44%), and displays (44%).

Preconception strategies identified in the “other” category included curriculum supports/resources (5), participation in the provincial preconception campaign (1), a folic acid supplementation project (1), evaluation of a campaign (1), internal staff training (1) and web information (1).

As compared to other health units, northern and south eastern health units were less likely to have implemented research initiatives. Northern health units were also less likely to undertake the following types of initiatives: resource development, information sessions and displays. Northern health units were more likely than other health units to indicate that they had distributed resources or implemented an awareness campaign.

*“Stickers were placed on contraceptives in our Sexual Health Clinics, which stated 50% of all pregnancies are unplanned, take a multivitamin every day.”*

*“We gave local Beauty Salons a brief educational session on the importance of Folic Acid/Multivitamins/Prenatal vitamins prior to pregnancy. We provided the Salons with a mirror cling which would prompt customers to ask about folic acid/multivitamins. The stylist would then be able to educate their client on the importance of multivitamins with folic acid prior to pregnancy. Customers were also given an emery board with a reminder to take a multivitamin daily. The campaign was piloted with 12 salons. All of the Salons that participated believed it was very successful and would like to continue.”*

*“We have developed attractive, evidence-based low literacy resources (posters/brochures) to increase awareness among high school aged women about folic acid.”*

### 3.3 Populations of Interest

**Survey Question:** Did your initiatives focus primarily on reaching (check all that apply):

	GTA	South east	South west	North	Ontario
Women planning a pregnancy	60%	88%	77%	83%	78%
Men planning a pregnancy	60%	50%	54%	50%	53%
Women at risk of unintended pregnancy	60%	50%	38%	0%	38%
Men at risk of unintended pregnancy	40%	13%	8%	0%	13%
Youth (aged 12-18)	60%	63%	46%	83%	59%
Health care providers	60%	50%	38%	33%	44%
Service providers	60%	13%	46%	0%	31%
Other	40%	13%	23%	0%	19%

**Table 3.3:** Populations of Interest for Preconception Health Initiatives (proportions based on health units that implemented preconception initiatives)

**Trends:** The most common populations of interest for public health preconception initiatives were women planning a pregnancy (78%), youth (59%), men planning a pregnancy (53%) and health care providers (44%). The least common population of interest was men at risk of an unplanned pregnancy (13%).

Populations of interest mentioned in the “other” category included teachers (3), young women (1) and the general public (1).

Health units in the GTA, south west and south east designed initiatives for a wider range of populations of interest, as compared to health units in the north.

*“It’s a tough sell!!! The planners are already doing the right things to prepare for pregnancy, while the non-planners and teens don’t give the preconception message much thought.”*

*“We believe physicians need to address preconception with their patients on a more regular basis.”*

*“The most effective activities for priority populations are done on a one-to-one basis.”*

### 3.4 Success of Initiatives

**Survey Question:** On a scale of 1 – 5 how would you rate the success of each of your preconception initiatives with 1 being not successful and 5 being very successful. If you are not sure please check the appropriate box.

Please tell us about the successes that your health unit achieved through your preconception initiatives.

	GTA	South east	South west	North	Ontario
Awareness campaign for general public	4.8	4	3.5	4	4.1 (n=14)
Media		3	3	3	3 (n=3)
Client resources	4.5	3	4	4	3.8 (n=14)
Web based info for clients			4.7		4.7 (n=3)
Displays / Health Fairs	5	3.7	3	3	3.4 (n=11)
Workplace initiatives	2	4	2.7	2	3.2 (n=10)
Preconception classes / workshops			2	2	2 (n=3)
Early prenatal classes that include preconception			5		5 (n=1)
Preconception clinic			1	2	1.5 (n=2)
Individual consultation		5			5 (n=1)
High school presentations	5	3	4.7	4	4.3 (n=8)
High school curriculum supports and resources	3	4	3.6	3.4	3.5 (n=14)
Health care provider awareness campaign		4	4		4 (n=2)
Health care provider training	4	5	4		4.4 (n=5)
Health care providers, providing them with client resources		3	2	3	2.8 (n=4)
Total average success score	4.2 (n=14)	3.8 (n=25)	3.6 (n=35)	3.2 (n=21)	3.6 (n=95)

**Table 3.4:** Relative Success of Preconception Initiatives

**Note:** This table presents average scores for different activity types, excluding the Not Sure and Not Applicable response categories. Average scores for each geographic area were calculated by adding the scores of all responses, and dividing by the number responses. Average scores of 4-5 indicate that the initiative was considered successful. Average scores of 1-2 indicate that the initiative was not considered successful.

**Trends:** This question asked about the perceived effectiveness of preconception initiatives that had been implemented by the health unit in the last 5 years. It did not ask how the health unit determined the level of success of each initiative, or the reasons that initiative may have received a low or high score. Some measures of success are likely evidence-based (for example number of participants, information on workshop evaluation forms etc.), while others are likely more subjective (staff's perception of the impact of an initiative).

The survey form provided space to identify up to 6 initiatives per health unit. Respondents frequently described additional initiatives in other areas of the survey, i.e. for a range of reasons, the data in Table 3.4 should not be viewed as a complete documentation of all public health preconception initiatives.

A total of 111 different initiatives were recorded for this question, including some initiatives that were not rated in terms of success. Responses varied widely in terms of perceived success. Overall scores were more likely to be positive rather than negative, i.e. the average score for all initiatives was 3.6 on a scale of 1 to 5.

Respondents indicated that they were unable to rate the success of 16 of the initiatives (i.e. responses of "not sure" and "not applicable"). These responses may indicate that the initiative was still in progress, the initiative was not evaluated, that evaluation was in progress, or that it was not possible to assess the effectiveness of a particular initiative.

Some of the identified initiatives addressed preconception health quite broadly, while others focussed on one specific preconception topic such as folic acid use or alcohol consumption. Some initiatives provided preconception information within the context of a broader event, for example providing information about health before pregnancy within a sexual health education mandate, or including preconception information in a prenatal health fair or in early prenatal classes.

The most common preconception initiatives implemented by public health over the last 5 years included high school curriculum supports and resources (14), awareness campaigns for the general public (14) and client resources (14).

Preconception strategies for the general public that were most likely to be considered successful (i.e. average score of 4-5) included awareness campaigns, web based information, prenatal classes that included preconception clients, individual consultations and high school presentations. Strategies for health care providers that were most likely to be considered effective included campaigns and training events. Preconception strategies that were least likely to be considered successful (i.e. average score of 1-2) included preconception classes and preconception clinics.

On average, initiatives in the GTA area were more likely to be considered successful (average score 4.2), as compared to strategies in the north (average score 3.2).

*"We have been able to increase awareness of preconception health with health care professionals and they are calling in to the health unit for information."*

*"Reached population of women of reproductive age in a variety of community settings through health fairs (at least 8 fairs, over 2000 people)."*

*"Met with 90 pharmacies to raise awareness with pharmacists re: need for multivitamin containing folic acid. Pre and post campaign survey indicated a change in knowledge in pharmacists re: need for multivitamin and a change in practice indicating pharmacists were discussing multivitamins with clients more frequently."*



**Successes:** The survey also asked an open-ended question about the successes achieved through preconception initiatives. The most frequent response was that resources for high school (curriculum, posters etc.) were well received and provided good reach (7).

There were comments about the reach of initiatives, for example respondents were pleased with media pick ups and reach (4), as well as the reach provided by an article in an internet workplace newsletter (1). Respondents reported an increase in the number of people accessing preconception information from the health unit web site (2).

Respondents mentioned their success with training events for service providers and health care providers, i.e. they were well received (3) and well attended (3). This resulted in more health care providers calling the health unit for information (3) and increased health care provider awareness (2).

Including preconception information in existing initiatives was also considered to be successful, for example providing preconception displays, brief workshops and handouts at prenatal fairs (3), and inviting people planning a pregnancy to participate in early prenatal classes (1).

There was also mention that partnerships had been initiated or strengthened (4) and that the provincial campaigns provided excellent local opportunities (1). Local and provincial data was also considered to be helpful in designing initiatives (1).

### 3.5 Lessons Learned

**Survey Question:** Please tell us about some of the lessons your health unit learned through your preconception initiatives.

**Results:** Respondents shared diverse lessons that they had learned in implementing their preconception initiatives, and there was little consistency.

Some respondents talked about planning and evaluating preconception initiatives. There was mention of the critical role of evaluation (3) and the need to develop formal project plans (1). One respondent talked about the benefits of involving a communications agency to assist in development of initiatives (1). While written materials were valued (1), there was also mention of the considerable amount of time it takes to get materials ready and approved for use on the health unit websites (2).

There was also discussion about the breadth of the topic of preconception, i.e. this mandate is not limited to reproductive health staff. Strategies need to be coordinated across many public health teams (3).

Respondents also talked about the lessons they learned with individual preconception initiatives. Some strategies were much more effective than others (2) and one respondent mentioned that it was easier to build preconception messages into existing strategies such as health fairs, rather than doing separate preconception initiatives. Inviting people planning a pregnancy to early prenatal classes was considered to be a success (2), while preconception classes (1) and preconception clinics (2) were not considered to be successful. There was also mention of the need for consistent messaging (1). One respondent thought bridal fairs were excellent opportunities, while another did not find



them to be successful. Another respondent indicated that their workplace initiatives were not successful. The perception that FASD was not a problem in one community presented barriers to implementation of prevention strategies (1). A safety issue was also mentioned, i.e. a pill container used as a promotional item was pulled as it posed a risk to children if they opened the container (1). Another respondent reported a poor response to preconception tools, as some staff members considered them to be intrusive (1).

There were several comments about reaching young people, including the difficulty engaging teens as the messages were not relevant to them (2), the amount of time required to set up and sustain peer models (1), and that teens responded to incentives (promotional items) (1). One health unit developed “edgy” resources for teens, but found they were not effective with other populations. Health units that had prepared lesson plans mentioned that it was hard to measure their effectiveness, and to find out if they were being used (2). Also, curriculum packages required regular updates (1).

There were also responses related to the lessons learned about engaging specific populations of interest. One health unit tried offering preconception education sessions at parenting groups. They were unsuccessful as most women had just had a baby, and preconception health was not of interest to them at that time. Another respondent felt that the literacy level of most preconception materials was too high for the general population. There were challenges in reaching higher risk populations, including non-planners (3). One-on-one strategies (1) were considered to be most effective, and partnerships with CPNP and HBHC (1) increased reach.

Barriers to preconception strategies were also mentioned. A health unit working in a small rural community mentioned that they did not have much success with preconception initiatives, unless there was a provincial strategy and resources were provided. There were also barriers to taking multivitamins including forgetting (2) and difficulty swallowing the pills (1). Strategies that provided reminders were considered important (2).

*“The posters were really well received by the students and staff – good comments – were eye catching.”*

*“Evaluation is key in determining next steps and success of strategies!”*

*“Build in evaluation right from the beginning.”*

### 3.6 Proposed Preconception Initiatives

**Survey Question:** Is your health unit planning any **new** preconception initiatives in the next year? (check all that apply)

	GTA	South east	South west	North	Ontario
Resource development	40%	13%	31%	0%	22%
Resource distribution	20%	25%	46%	50%	38%
Information sessions	20%	13%	15%	17%	16%
Awareness campaigns	20%	25%	15%	33%	22%
Media (i.e. TV, newspapers, radio)	20%	13%	23%	33%	22%
Displays	20%	13%	23%	0%	16%
Research (i.e. literature review, survey, environmental scan)	40%	13%	23%	17%	22%
Other	20%	0%	54%	17%	28%

**Table 3.6:** Proposed New Preconception Initiatives

**Trends:** Many health units indicated that they had not made final decisions about future preconception initiatives. Others indicated that they were continuing with current initiatives, or updating current initiatives, but not planning for new initiatives. Only 56% of health units identified that they were planning specific new initiatives for 2009. The most common new preconception initiatives for public health included resource distribution, resource development, awareness campaigns, media and research.

Comments listed under “other” included development of plans for 2009 (4) and maintaining/updating current initiatives (2). There was also mention of tentative preconception plans to reach health care providers (1), develop a web based self assessment tool (1), focus on women aged 35 or higher (1), initiate new partnerships (1), promote displays and resources to workplaces (1), and to offer early prenatal classes that are inclusive of people planning a pregnancy (1).

As compared to other geographic areas, northern health units were less likely to be planning resource development or displays. They were more likely to be planning resource distribution initiatives.

*“We would like to do more in this area and develop a more formal project and plan around the provision of preconception programming.”*

*“We now want to target the schools.”*

*“We have explored how best to reach youth with preconception health messaging – a challenge at best, but hope to work more closely with our partners in school age health.”*

### 3.7 Populations of Interest for Proposed Strategies

**Survey Question:** Do your new initiatives focus primarily on reaching (check all that apply):

	GTA	South east	South west	North	Ontario
Women planning a pregnancy	40%	63%	69%	50%	59%
Men planning a pregnancy	40%	50%	62%	50%	53%
Women at risk of unintended pregnancy	20%	25%	31%	33%	28%
Men at risk of unintended pregnancy	20%	13%	23%	0%	16%
Youth (aged 12-18)	0%	50%	31%	17%	28%
Health care providers	0%	50%	31%	33%	31%
Service providers	0%	25%	31%	17%	22%
Other	20%	0%	31%	17%	19%

**Table 3.7:** Population of Interest for Proposed New Preconception Health Initiatives

**Trends:** The most common populations of interest for proposed initiatives were women and men planning a pregnancy. In comparison, men at risk of an unintended pregnancy were an infrequent choice as a population of interest.

Comments listed under “other” identified that some health units are in the process of making decisions about their populations of interest (1) and others planned to maintain the same populations of interest (1). Other comments indicated that health units had selected a specific population of interest including pharmacists (1), people accessing the web site (1) and clients attending early prenatal classes (1).

Health units in the north, south east and south west were considering initiatives for a wider range of populations of interest, as compared to the GTA.

*“It is tough trying to promote preconception health by itself. Using other opportunities such as health fairs, events, inviting women (and men) who are not yet pregnant to participate in groups that also include pregnant women in their early pregnancy may be more attractive and less threatening. Written materials are also valued.”*

*“Other strategies provide opportunities to include preconception messages, e.g. curriculum support resources for teachers. Prenatal fair advertising is also aimed at couples planning a pregnancy.”*

### 3.8 Challenges

**Survey Question:** Please tell us about the challenges your health unit faces in planning, implementing and/or evaluating preconception initiatives.

**Results:** Respondents mentioned a range of challenges to implementing preconception health strategies. The majority of challenges related to a shortage of resources including staffing (11), funding (7) and other competing priorities (4).

Another theme was challenges in working with specific populations, for example the need to identify strategies to engage populations with lower levels of interest in preconception health (7), non-planners (4) and health care providers (3). A few respondents mentioned the challenges of working in small and/or rural communities where men and women may not want to identify that they are planning a pregnancy, as well as limited communication strategies, transportation etc. (3).

Respondents also identified the need for stronger collaborations, including stronger collaborations between community partners (3) and information sharing between health units about what worked and what didn't (2).

Respondents mentioned the shortage of supports for example the lack of tools for environmental scans and audience analysis (1), weak evidence for the effectiveness of initiatives (2) and no easy to read client resources in a range of languages (1). They felt that the resources and strategies provided through provincial campaigns were helpful; however this support was infrequent (3). They also felt the need for advice and consultation on strategies (3) and on how to determine their effectiveness (1).

*“The biggest challenge was staffing. Because it has been difficult to engage the public with this topic in the past, preconception programming has been placed on a back burner whenever reproductive health staffing issues have arisen. Staff shortages have occurred frequently!”*

*“We need more feedback amongst health units re: strategies that are being used, that work and don't.”*

### 3.9 Needs

**Survey Question:** Please tell us about things that Best Start Resource Centre could do to help you plan and implement successful preconception initiatives.

**Results:** There was strong support for existing services provided by Best Start Resource Centre. Respondents indicated that they played an important role in helping health units to provide local preconception services and that Best Start should continue to do what we are already “doing so well.” Respondents wanted the Best Start Resource Centre to continue take the lead on this topic. They talked about the roles that Best Start Resource Centre could play in supporting their work, including consultation/training, resource development, provincial campaigns, research and advocacy.

The most frequent request from health units was for Best Start Resource Centre to continue to develop high quality preconception resources (16). Best Start resources were described as excellent, evidence-based, well received, well used, helpful, consistent, cost effective, practical and current. Requests to develop specific client preconception resources included curriculum materials, workbooks, pamphlets, video/DVD's for use with high schools, posters and promotional items. Other resource gaps included materials in languages other than English, low literacy resources and resources designed for rural populations. There was also an identified need for health care provider resources. Respondents wanted the resources to be free or affordable, and also mentioned the need for regular content updates.

Best Start Resource Centre's provincial campaigns are popular, and there were many comments about their important role in supporting local initiatives and in providing consistent provincial messages (8). Respondents felt they were able to build local strategies on the provincial strategies to increase local visibility of the messages. Respondents appreciated the inclusion of provincial high level strategies that may not have been possible at the local level, for example transit advertising, television ads and physician mailouts. Media ready resources including PSA's for radio and newspaper articles, as well as resources (pamphlets, posters) for distribution helped in the implementation of local initiatives. Respondents suggested that upcoming campaigns focus on topics that are currently in the media, for example preparing for pregnancy, folic acid, healthy weights, alcohol, tobacco and other substance use, as well as topics that have been challenging on the local level, for example reaching people at risk of an unplanned pregnancy. They suggested that health unit expertise be used in

planning the campaigns and that rural and urban populations be considered in the campaign strategies.

Respondents described Best Start Resource Centre reports as very helpful, and identified the need for additional research to guide their work (7). They wanted a better idea of client needs, preconception strategies that were successful in other communities, best practices to reach people not planning a pregnancy, and evidence on current issues such as folic acid and BPA's.





In addition to research and strategy reports, respondents also wanted opportunities for training and consultation (4). They wanted to learn more about preconception initiatives that were successful in other communities, how to reach priority populations, and to increase their skills and comfort levels in working on preconception strategies.

Three health units asked that Best Start Resource Centre take on a provincial role in encouraging school boards to make preconception teaching a formal part of the provincial curriculum.

*“The reports generated by Best Start are helpful because they inform us of how other health units are addressing the issues and give us ideas.”*

*“Continue to do what you are already doing so well, the resources that you produce are great and have been very useful to us in promoting these messages.”*

*“Take the lead and continue providing excellent resources, with consultations and provincial campaigns included.”*

*“It's very helpful when Best Start creates the resources, develops a plan for province-wide distribution, and gives Health Units ideas about local promotion. I love that we can all give a consistent message, and be assured that the information is current and evidence-based!”*

### 3.10 Other Local Preconception Initiatives

**Survey Question:** Are you aware of any other preconception initiatives in your community or region? If yes, please describe briefly.

	GTA	South east	South west	North	Ontario
Yes, aware of other local preconception initiatives	0%	0%	17%	0%	7%
Not aware of other local preconception initiatives	100%	100%	83%	100%	93%

**Table 3.10:** Other Local Preconception Initiatives

**Trends:** Almost all health units indicated that they were unaware of other preconception initiatives in their community or region (93%). Only 2 health units, both located in the south west, identified other community or regional preconception initiatives. They included a partnership with Ontario Early Years Centres for a community wide coordinated and integrated approach to reproductive health, and participation on the Central South West Reproductive Health Working Group.

*“We are currently trail blazers especially in targeting non-planners around preconception health – a tough task.”*

## 4. Implications for Ontario

Previous sections share highlights and details of the survey results. This section discusses the implications of the survey results. It considers the underlying factors, reflects on the significance to preconception health and preconception services in Ontario and shares recommendations.

### 4.1 Discussion

#### *Public Health Preconception Initiatives*

In anticipation of updated Ontario Public Health Standards (released November 2008), which have a stronger focus preconception health, reproductive health teams in public health departments across Ontario have been actively designing and testing a wide range of preconception initiatives. This survey gathered information about over 100 preconception interventions that took place across Ontario over the last 5 years.

The total number of initiatives mentioned in the survey results is an under representation of actual numbers of public health preconception initiatives in Ontario, as the questionnaire asked for only 1-6 examples of initiatives per health unit. In addition respondents may not recall all health unit initiatives that could impact on preconception health and 4 health units did not respond to the survey.

The results of this survey give an indication of the types of preconception strategies that were perceived to be effective through Ontario public health services, and those that were not. It also provides insight into the challenges, lessons learned and next steps for public health. The survey however, did not provide a lot of depth regarding individual initiatives, how they were planned, implemented and evaluated. Case studies will be helpful in sharing additional detail regarding a selection of more successful initiatives.

While most health units (88%) indicated that they had implemented preconception initiatives over the last 5 years, all health units likely have preconception initiatives in place. A wide range of common public health initiatives have the potential to positively impact on preconception health, for example school based sexual health education, smoking cessation services and messages about stopping drinking prior to pregnancy.

To date, public health preconception initiatives have focussed mainly on awareness and education at the population level including resource development and distribution, information sessions, awareness campaigns, media strategies and displays. Most of these strategies were designed to reach men and women planning a pregnancy, youth and health care providers. Since preconception health is still a relatively new issue, this was an appropriate focus.



## ***Moving Forward***

While preconception awareness and behaviours have improved in men and women of childbearing age (Best Start, 2009), continued efforts are needed to ensure that individuals have ready access to information about preconception risks, and about improving their health prior to pregnancy. In addition, strategies should be designed specifically for populations with higher levels of risk, and lower levels of awareness.

As understanding of preconception health builds, more efforts need to be focussed on higher level strategies including environmental supports and policy change, while maintaining access to key information about preconception health.

Through testing over the last 5 years, public health has gained an improved understanding of the strategies that are effective, and those that produced minimal results in the Ontario context. The average success score of preconception initiatives was 3.6 on a scale from 1-5. While this is toward the positive end of the scale, scores should improve as public health discards initiatives that were less successful, and focuses more on initiatives that had good reach or impact.

## ***Engaging the General Public***

The most common public health preconception initiatives over the last 5 years included high school curriculum supports and resources, awareness campaigns for the general public and client resources. Preconception strategies that were most likely to be considered successful included awareness campaigns, web based information, prenatal classes that included preconception clients, individual consultations and high school presentations. These successful strategies should be a continued area of focus for public health.

Preconception strategies that were least likely to be considered successful included preconception classes and preconception clinics. Given the interest in preconception classes by men and women of childbearing age (Best Start, 2009), it may be of benefit to continue to test practical approaches. For example there may be more interest in a single 2 hour session as opposed to a series of sessions spread over several weeks. As awareness and understanding of preconception health increases, there may be an increased interest in preconception classes, and improved comfort levels in attending public events on this topic.

## ***Reaching Health Care Providers***

Training events and campaigns for health care providers over the last 5 years were also considered to be very successful. In the survey of men and women of childbearing age (Best Start 2009), while most respondents placed a high value on information received from their health care provider, the majority did not recall their health care provider talking to them about improving their health prior to conception. Given the credibility of this information source, efforts to improve preconception health should include strategies to provide health care providers with needed information, tools and resources.

## ***Building Preconception Health into Existing Services***

The most common challenges mentioned by respondents were insufficient time, insufficient budget and competing priorities. Also, respondents talked about difficulties in presenting preconception health on its own. One theme throughout the survey was the benefits of combining preconception information with other initiatives, rather than focussing solely on preparation for pregnancy. Examples include including preconception displays, handouts and workshops in prenatal health fairs, and inviting individuals who are planning a pregnancy to attend specially designed early prenatal classes. Out of the 32 responding health units, 4 indicated they had implemented or were considering early prenatal classes





that were inclusive of pregnant women, and 6 indicated they had implemented or were considering prenatal health fairs that included preconception information (note: these responses were recorded in different areas of the survey so these totals do not appear in Section 3 of this report).

This appears to be a promising approach, and has the benefit of meeting preconception health needs without the

funds and time required to design, implement and evaluate additional new initiatives. Information can be provided in a cost effective way through existing services, such as health unit websites, print materials, health lines and sexual health education. There are clear benefits to including strategies that build on existing initiatives, and are low cost and easy to implement.

### ***Need for Privacy***

There was also discussion about the fact that men and women may not want to identify that they are planning a pregnancy. Preconception initiatives should include some strategies where information can be accessed in a manner that ensures privacy. When information is provided on the internet or through one-on-one discussions such as health lines, men and women do not need to disclose to other community members that they are planning a pregnancy.

### ***Need for Collaboration***

Preconception health is a broad issue that does not exclusively fall under the domain of reproductive health. Respondents identified the need for internal collaborations with teams such as chronic disease, injury prevention, sexual health and school health.

Respondents also mentioned the need to have stronger connections between health units, so they could learn from each other's efforts to implement successful preconception initiatives. Opportunities for information sharing could include discussions on the Best Start listserv, moderated teleconferences for this purpose, or face to face forum events. Case studies of Ontario preconception initiatives would also provide service providers with details about preconception initiatives in this province.

Respondents also recognised the need for stronger community collaborations including better connections with health care providers and other organizations that have the potential to influence preconception health. Only 2 respondents were able to identify other community preconception initiatives (i.e. not planned by the health unit). Community mapping discussions may be helpful in identifying organizations that are working on preconception health, or have the opportunity to influence preconception health.



## ***Framework for Action***

The Alberta (2007) preconception framework includes the following key strategies: promoting public awareness and knowledge, building capacity to provide preconception health services, and championing preconception health promoting environments. To date public health initiatives in Ontario have focussed mainly on awareness and health services. With strengthening awareness and behaviours in Ontario (Best Start, 2009) it would be timely to start investigating environmental supports and policies regarding preconception health. In addition, strategies for health care providers continue to be critical.

The Centres for Disease Control and Prevention (United States) have recommendations and guidelines to improve preconception health (CDC, 2006). Their goals are to improve the knowledge, attitudes and behaviours of men and women related to preconception health, assure that all women of childbearing age in the United States receive preconception care services (i.e., evidence-based risk screening, health promotion, and interventions), reduce risks through interventions during the inter-conception period, and reduce the disparities in adverse pregnancy outcomes. Ontario has been working intensively on changing knowledge and behaviours of men and women, and there are a range of services designed to meet the needs of vulnerable pregnant women and parents (for example Community Action Program for Children, Canada Prenatal Nutrition Program, Healthy Babies Healthy Children, Best Start sites and Ontario Early Years Centres). These programs may also have an impact on preconception health. Public health in Ontario has implemented a limited number of preconception initiatives directed to health care providers. Initiatives for health care providers should be a primary focus of preconception work over the next few years. Few initiatives in this survey related to the inter-conception period, the time period between the delivery of one baby and the next conception. This is an opportunity that should be explored further in Ontario.

## ***Research***

The survey results suggest the need for additional research in a number of areas including:

- Strategies that are effective in reaching men on the topic of reproductive health.
- Strategies that are effective in reaching men and women at risk of an unplanned pregnancy.
- Identification of information and resource needs of health care providers.
- Opportunities for public health inter-conception preconception initiatives.
- Opportunities for preconception environmental supports and policy changes.

## ***Supports at the Provincial Level***

There are benefits to providing certain preconception supports and services at the provincial level, to avoid duplication, for efficiency, cost effectiveness and to provide consistency in messaging. Respondents expressed strong support for existing provincial services provided by Best Start Resource Centre. Respondents indicated that Best Start played an important role in helping health units to provide effective local preconception services. There was interest in additional resources developed through Best Start including awareness campaigns, manuals to guide their work, information about client needs, preconception strategies that were successful in other communities and how to reach populations of interest.

## 4.2 Summary of Recommendations

### *Local Strategies*

The results of this survey indicate a need for local efforts to:

- Continue to ensure that individuals have ready access to information about pre-conception risks, and what they can do to improve their health prior to pregnancy.
- Design strategies specifically for populations with higher levels of risk, and lower levels of awareness.
- Consider options for higher level strategies including environmental supports and policy change, in addition to awareness and education initiatives.
- Choose from strategies that have been shown to be successful in reaching the general public, such as awareness campaigns, web based information, prenatal classes that included preconception clients, individual consultations and high school presentations.
- Consider and test options that may improve participation in preconception classes.
- Make it a priority to include strategies to reach health care providers with preconception information, tools and resources, for example campaigns and training events.
- Build preconception content into existing strategies, for example including preconception information in prenatal health fairs and inviting individuals planning a pregnancy to attend early prenatal classes.
- Include strategies that provide individual (private) access to preconception information such as one-to-one counselling and internet-based information.
- Consider opportunities for internal and external collaboration.
- Find out what other health units are doing.

### *Provincial Strategies*

In addition to local strategies, there are benefits to provincial strategies that:

- Develop a provincial preconception health framework, such as the Alberta preconception framework (Alberta Perinatal Health Program, 2007) and the United States preconception recommendations and guidelines (CDC, 2006).
- Develop case studies with detailed information about specific Ontario preconception initiatives including information about evaluation results and lessons learned. Make the case studies available electronically.
- Continue with central provincial development of key preconception resources.
- Continue to provide web-based information for men and women who are planning a pregnancy.
- Continue to gather and share information about effective preconception practices, and effective strategies to reach populations of interest.
- Continue to offer training opportunities and consultation services for Ontario service providers on preconception strategies.

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The Best Start Resource Centre supports service providers across Ontario through consultation, training and resources, in the areas of preconception, prenatal and child health. The Best Start Resource Centre is a key program of Health Nexus.