UNIVERSAL ACCESS TO PUBLICLY FUNDED CONTRACEPTION IN BRITISH COLUMBIA

Update: June 28 2010

This proposal is an initiative to coincide with the 50th anniversary, in 2011, of Options for Sexual Health (Opt). Opt is a registered charitable organization providing comprehensive clinical, education information and referral services in sexual and reproductive health to all British Columbians. Opt's vision is a society that celebrates healthy sexuality, its diversity of expression and a positive sexual self image for individuals throughout life. You can learn more about Opt by visiting www.optionsforsexualhealth.org.

***We invite you to express your support for, or your concerns about, this proposal by sharing your views with*:**
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EXECUTIVE SUMMARY

Publicly funded contraception for all British Columbians is good public policy.

It is good economic policy. The investment will yield a significant return in reduced public expenditure beyond the cost. The yield will be higher for specific population sub-groups in need of extensive income and other assistance. Support of planned parenting will enhance the learning and earning potential of British Columbians, and have a positive impact on the province's child poverty rates.

It is good health policy in both the preventive and therapeutic spectra. The measure will improve health outcomes for mothers and infants by reducing the risks associated with unintended pregnancy, particularly among adolescents and by maximizing the health benefits and outcomes of preparing for planned pregnancy. Oral contraceptive use also contributes to reduced rates of ovarian and uterine cancer, and has other numerous non-contraceptive therapeutic benefits in such conditions as dysmenorrhea, endometriosis and premenstrual syndrome. Decision making about contraception is also a focal point in the health dialogue with care providers for enhancing the health knowledge and skills of individuals.

It is good social policy. Removing all barriers to accessing contraception is a powerful affirmation of the right of women to determine for themselves when and whether to become pregnant and bear children, a right supported in both federal and provincial arenas. Providing a complement to the protection currently afforded to abortion rights creates a new and positive policy dynamic.

It is good education policy. The availability of publicly funded contraception will have a significant impact on normalizing the conversation about sexual and reproductive health, and on increasing the likelihood that school sexual health curriculum includes comprehensive, factual and non-judgmental information on contraceptive use.

It contributes to the province's strategic approach to sexual and reproductive health; it is a cost-effective extension of provincial government policy that currently provides publicly funded contraception to some residents based on demonstrable public and personal benefit. With that policy the government assumes a duty of care, and this proposal offers the ability to fulfill that duty efficaciously and equally for all.

This is an opportunity for BC to enhance its already strong reputation for leadership on sexual and reproductive health in Canada. For years the BC Government has helped to maintain a network of nearly 60 community-based sexual and reproductive health clinics that are the envy of the rest of Canada. This same network offers a major component of a contraceptive program delivery system.

Publicly funded contraception is a good idea, but not a novel or unusual one. Canada lags behind over 30 other developed countries in Europe and elsewhere in this policy area. BC's leadership can show the rest of Canada the way to an affordable program with significant economic, health and social benefits.

INTRODUCTION

The time has come for BC to take the simple and cost-effective step of providing universal access to publicly funded contraception to all women of reproductive age as a significant preventive health measure that complements the objectives and core functions of the public health system.

This document is a starting point for the development of a comprehensive position paper and strategy for the advocacy of universal contraceptive coverage for all women in BC. Women are the primary focus of this initiative; male condoms are already freely available, and vasectomy (the only other intervention focused on men) is covered under the Medical Services Plan.

The objective of this document is to solicit advice and input from stakeholders in all sectors of BC society with respect to this proposal. Unless otherwise permitted, all input will be used without attribution to the source.

Universal Coverage for Contraception is Good Economic Policy

A report prepared by Planned Parenthood BC for the Ministry for Children and Families in February 1999 succinctly stated the equation: "subsidized contraception or subsidized babies". There is dramatic evidence from many jurisdictions for the economic sense of subsidizing contraception. Here are just two examples for BC:

- A dollar on contraceptive support for a woman can save as much as ninety dollars in public expenditure on social supports. A profile of contraceptive use in BC's Opt clinics indicates that the average woman will use $104.40 in contraceptive products annually, for a total of less than $4000 over a 30 year span. By contrast, the cost of subsidies to one young parent requiring social supports to raise a child to age 18 has been reported by the Canadian Council for Social Development and Manitoba Agriculture at $167,000, or over $9000 a year (Manitoba Agriculture, Food and Rural Initiatives, 2004).

- The health system costs associated with a single delivery without complications (CIHI, 2006) would cover a full year's contraception for 33 women. Add the cost of complications and the number of women who could be provided with contraception virtually doubles.

The economic benefits and impacts of publicly funded contraception fall into three categories: reducing public expenditure, impacts on the private sector, and optimizing the economic power of BC residents.

Reducing Public Expenditure

Health Canada data now over twenty years old indicated that for every dollar spent on preventive sexual health programming, ten dollars are saved in downstream health and social expenditure related to unintended pregnancy (Health Canada, 1999, p. 6). Public funding of contraception represents one such preventive measure that can make a significant contribution to those savings in BC. We calculate that the impact on public expenditure would be a reduction of no less than $95 million annually. This does not take into account savings that would accrue in public expenditure on program administration costs as demand for other support services declines.

Other jurisdictions have experienced substantial reductions in public expenditure with their own programs of publicly financed access to contraception.

- An evaluation of California's Family PACT program (see Appendix B) calculated cost savings of more than $7 for every dollar spent in contraceptive services and supplies in a total client population of 955,000 women. (Foster, 2009, p. 446). Forrest et al provided data on the overall impact in the state: annual savings of between $232 and $509 million on annual expenditure of $46 million (1990, p. 161).

- The Guttmacher Institute conducted an analysis of program costs and cost savings (Policy Review, 9 (3), 2006) that would be experienced through expansion of US Medicaid coverage of contraception to include all women who would be eligible for Medicaid-funded birth. The total cost would approach $800 million, but the costs averted through reduced unplanned births would amount to some $2.3 billion, a three-fold return (2006, Para. 18).

- One analysis of the contraceptive access program in the UK established a benefit cost ratio of 11:1, with total savings of 3.97 billion pounds over a 13 year period (McGuire, cited in Mavranezouli, 2009). Another based on narrower parameters nevertheless established net returns of one billion pounds over a 15 year period (Armstrong and Donaldson, cited in Mavranezouli, 2009).

- Benefits are observable even on a small scale. In one Swedish town with 11,000 women of reproductive age, a two-year project of subsidized contraception yielded public expenditure savings related to reduced abortion costs alone, of US$34,000.(Gustafsson, 1994, p. 2).

Appendix B describes the calculations used to estimate the total cost of a publicly funded contraception program for British Columbia. We estimate the maximum annual cost of the program to be approximately $52 million. This represents 0.326% of the Provincial Government's current health expenditure plans (estimated 2012-13 budget: $16.127 billion). Annual savings in public expenditure for health, social and income supports are estimated to be a minimum of $95 million. Given the experience

of other jurisdictions, this appears to be a very conservative assessment of what to expect.

Impacts on the Private Sector

- A number of insurance companies reimburse insured persons for all or part of their contraceptive costs. Publicly funded contraception would result in savings for those companies in terms of their outlays for reimbursement. It is essential to have a dialogue with them around their contribution of some of those savings to the program as a revenue offset. That contribution translates directly into a further reduction in public expenditure.

- Quality control is an issue that limits the confidence attached to some generic contraceptive products, particularly low-dose products where small variations may render the product less effective and reliable. Acceptance of generic products in the provincial plan can be linked to expectations of improved quality management. This is ultimately of benefit to those manufacturers who respond because it builds confidence in their products in a market with millions of dollars at stake.

- The multi-million dollar market represented by a province-wide program will also have a significant dampening effect on manufacturers' price increases. Opt's experience verifies this, even with the relatively modest volume of contraceptive purchases involved in the clinical services program. Moreover, BC's ability to demonstrate the benefits of a publicly funded contraception program is expected to move other provinces to act. The added cost benefit of bulk purchasing on an interprovincial scale will be significant.

Optimizing the Economic Power of BC Residents

There are several dimensions to this benefit:

- The ability of women to plan whether and when to have children has a direct and positive impact on the education level they achieve, and thus their contribution to the social and economic capital of the province. The importance of education is clear in the public expenditure being made to provide in-school day care to adolescent mothers, to assist them to stay in school.

- Earning power is tax revenue. While the political agenda may include dropping people from the tax rolls, the public policy agenda includes measures that support individuals to increase their earning potential, with a resulting contribution to the tax revenue that supports all public services.

Contributing to BC's Strategic Approach to Sexual and Reproductive Health

Federal/Provincial/Territorial discussions on sexual and reproductive health in Canada culminated in 1999 with the publication of *Consultations on a Framework for Sexual and Reproductive Health* (Health Canada, 1999). The Framework comprises eight principles and seven strategic directions agreed upon by consensus. Supported by the BC and federal governments and led by Options for Sexual Health, BC was the first province to assess the application of the Framework to the provincial health and social environment.

The proposed contraception initiative for BC is an important and direct strategic response to at least three of the Framework's principles:

- *Principle 3: The promotion of sexual and reproductive health and prevention of problems will reap the greatest benefits.*

- *Principle 4: Health interventions should be safe, effective and evidence-based, and individuals should be fully informed before making decisions.*

- *Principle 6: Access to sexual and reproductive health programs and services should be equitable, responsive to diversity, and not limited because of discrimination based on gender, age, race, ethnicity, marital status, sexual orientation, religion, culture, language, socio-economic status, disability or geographic location.*

The initiative also contributes to the pursuit of several of the Framework's strategic directions:

- *Personal Choices: increasing the opportunities for all individuals to develop and maintain the knowledge, capacities, skills and behaviours needed to make healthy personal choices throughout life.*

- *Access to Services: facilitating equitable access to effective health services and treatments that prevent problems and promote, protect and restore sexual and reproductive health.*

- *Social and Economic Conditions: reducing social and economic risk conditions, particularly poverty and discrimination, that limit opportunities to achieve sexual and reproductive health.*

In 1997 British Columbia established six health goals, with supporting objectives and progress indicators. Goal 2 is stated as:

> *"Opportunities for all individuals to develop and maintain the capacities and skills needed to thrive and meet life's challenges and to make choices that enhance health."*

Among the objectives is: *"increasing the percentage of sexually active British Columbians who use appropriate contraception and safer sex practices"*. Suggested indicators included the teen pregnancy rate and the abortion rate.

The Provincial Health Officer is charged with the task of reporting regularly on our progress toward their achievement. Dr. Perry Kendall's 2002 Annual Report included an assessment of sexual health as part of Health Goal 2. He noted that Europe has better teen sexuality outcomes than Canada and the US, and cited research from *Advocates for Youth* that identified unimpeded, even free, access to contraceptives as one of the factors affecting the European success; another was that political or religious groups have little influence on public health policy. (p. 66). Dr. Kendall's own recommendations fell short of proposing universal coverage, but he did comment that "more should be done to promote healthy, responsible sexuality and alternative methods to abortion, such as the more widespread availability of emergency contraception." (p. 68). In fact BC took steps, first to extend the scope of pharmacists' practice to include prescribing emergency contraception (EC), then to adopt changes in federal regulation that made EC available as a non-prescription product.

Reproductive Rights and Public Policy Response

Women in BC have the right to determine for themselves when and whether to become pregnant and bear children. That right is reflected in Canadian law and provincial public health policy, though imperfectly. The imperfection arises in large measure because there are barriers in the reproductive lives of many women that impede their ability to exercise that right. Access to reliable, affordable, confidential and clinically appropriate contraception is one of those barriers. Judgmental attitudes among some providers of health services, weaknesses in the protection of confidentiality, and gaps in preventive sexual health education are associated barriers.

Public health policy recognizes these barriers for some individuals and groups, but not for others. The federal government covers the full cost of various contraceptive options for Status Indian women. Some Regional Health Authorities in BC provide oral contraceptives to youth free of charge. The definition of "youth", however, varies from Authority to Authority, suggesting that the Provincial public health goals being met with this measure are not clear. Some recipients of social assistance and disability

assistance in BC have subsidized access to prescription medications including oral contraceptives. Effective March 15 2010, however, the Government removed "contraceptive devices" (IUDs) from the items covered by these programs (media release, para. 7), even though they are a very cost-effective option. On-line subsidies for other products are available but they involve a cumbersome process that can discourage applicants, particularly those with limited computer skills. Recipients of assistance have experienced judgmental attitudes in the social assistance arena that make access to contraceptives unequal and demeaning for some (e.g. if a woman is not supposed to have a supporting partner while receiving social assistance, why does she need contraception?).

There are other precedents of importance.

- The Province already pays the cost of a variety of vaccinations as a preventive and protective health measure because it has both personal and social benefits in terms of health and wellbeing. Public policy affecting access and barriers to vaccination is based on established scientific and clinical evidence; the same evidence base should apply to the policy framework for contraception.

- Adults and youth routinely have publicly funded access to condoms through a variety of access points and activities (e.g. condom blitzes in bars). As many of these activities are collaborations between public health and not-for-profit organizations, the groundwork has already been laid for efficient and effective collaboration in the delivery of a comprehensive contraceptive program.

- While the supply has diminished, physicians continue to give free contraceptives to patients from samples provided to them by pharmaceutical manufacturers. From a public policy perspective, though, this is an inherently inequitable practice.

- The Society of Obstetricians and Gynecologists of CANADA (SOGC) has a national program in place to provide women in need with free contraception. Administrative difficulties make the program hard to access; nevertheless, this professional practice initiative serves to illustrate the benefits of a public policy approach.

- Many other countries already subsidize, in full or in part, universal access to contraception; examples include the UK, France, Spain, Sweden, Denmark, the Netherlands, Italy and Germany (Centre for Reproductive Rights, 2009). This has not been done merely as a politically attractive measure; it has been done because the personal and public health and social benefits far outstrip the cost.

- Washington State is one of some thirty jurisdictions in the USA that have programs providing free contraception for women and men who have no health

insurance or whose plans do not cover contraceptives. This is not a universal access program, but it does have something to offer as a logistical example (see Appendix B).

Over the past several years the BC Government has signaled a general sentiment toward preventing unintended pregnancy and its consequences in various other ways:

- It funds the delivery of clinical services through Options for Sexual Health and the Island Sexual Health Society with the implicit goal of keeping contraception affordable. To the extent that this goal is still in play, the movement from partial subsidization to full subsidization is really only a matter of degree: the community approach to program delivery has a long track record of effectiveness.

- It has supported the transition of emergency contraception from prescription status and physician control, through the extension of prescribing functions to pharmacists, and now to non-prescription status.

- It has expanded the scope of practice of registered nurses into contraceptive and STI management, increasing access to contraception and other supportive sexual and reproductive health services through an expanded network of service providers. This move has established a vitally important foundation for an efficient and geographically comprehensive delivery network for publicly funded contraception.

- Through some public health units and youth clinics the Government currently makes emergency contraception available to women without cost.(Unfortunately, it is not also provided to men in advance of need, though Opt recommends this practice.) Emergency contraception is a relatively expensive and less effective measure than providing continuing contraceptive protection in the first place, but it can represent a source of funding for universal coverage.

Contraception, Harm Reduction and the Duty of Care

Harm reduction is a principle embraced by public health authorities in a number of areas. The BC Centre for Disease Control defines it as follows:

> Harm reduction involves taking action through policy and programming to reduce the harmful effects of behaviour. It involves a range of non-judgmental approaches and strategies aimed at providing and enhancing the knowledge, skills, resources and supports for individuals, their families and communities to make informed decisions to be safer and healthier. (BCCDC, 2009, p. 1)

Harm reduction is a concept not limited to "risk behaviours"; it addresses the full range of normal everyday human behaviour to which some risks may be attached. At one end of the harm reduction spectrum are legislated measures for the breach of which formal penalties apply. Examples of this are helmet and seat belt laws, and restrictions on cell phone use while driving. At the other end of the spectrum is a measure like the *InSite* clinic, providing a safe alternative for injecting banned substances as part of an overt harm reduction strategy. Universal access to contraception fits within that spectrum.

Once government adopts a public health measure and makes it available to the populace, it has a duty of care to ensure the effectiveness of what it does. More particularly, when the public health system offers contraceptive care to the public it has a duty to provide effective care.

Through the public health system the government offers free condoms on request. In this case the system is offering the public the least effective means of contraception (short of abstinence) free of charge, while more effective means are not provided on the same basis. The argument that this measure is focused on STI prevention would not hold water, because internal condoms are not offered in the same context. Since the government has not presented the economic or other reasons why it does not provide the most effective protective options available, the situation could be seen as a breach of that duty of care, especially with respect to women. The situation is exacerbated by the government's difficulty in ensuring barrier-free access to abortion services as a remedy for its breach of duty.

A corollary public duty may be associated with mandated sexual health education in schools. The prevailing focus of learning outcomes and curriculum is on the risks and harms associated with unintended pregnancy and exposure to STIs. This emphasis arguably carries with it the duty to provide barrier-free access to protective and preventive clinical services and contraceptive products. This duty is implicitly acknowledged in the availability of free contraception in youth clinics sporadically around the province, so why are all youth not treated equitably?

Publicly Funded Contraception is Good Education Policy

Publicly funded contraception will contribute significantly to the normalization of sexual and reproductive health. The impact will be felt in several settings, but nowhere is it of more importance than in the education system. The fact that sexual health education is mandated is not in itself sufficient to ensure that youth receive comprehensive, factual and non-judgmental information on their options for preventing pregnancy and sexually transmitted infections. Whether or not youth feel that contraception is consonant with their personal values at a given point in time, the education system has a clear duty to provide accurate and complete information needed to make that personal judgment.

- Abstinence is an essential choice in any sexual health education curriculum. But curriculum based only on that option, and on a litany of fearful and often misleading risks associated with other choices, has a woeful track record of ineffectiveness. Public funding of contraception sends a clear message to school boards and students that reliable information on contraception is a normal and expected component of sexual health education.

- Normalizing the conversation on contraception carries with it the benefit of making conversation on all other aspects of sexual and reproductive health more comfortable and effective for all concerned. We assume that the purpose of sexual health education is to help youth through adolescence and adulthood as healthy, confident and sexually expressive human beings. Any steps that make their education more successful are good education policy.

- Education doesn't stop at the schoolyard. In all other environments where youth and adults with special care requirements live, the issues of intimacy and sexual expression are also present. Professional training and resident education programs in these settings are in their infancy, relatively speaking. Normalizing even part of this complex issue will contribute greatly to facilitating the training and education that are needed, to the confidence and compassion offered in these settings, and to the health and wellbeing of residents.

Access to Contraception is Good Health Policy

At the outset, two important perspectives need to be made clear.

- The Society of Obstetricians and Gynecologists of Canada notes that "effective contraception is underutilized in Canada. Estimates suggest that [in 2007] in Canada there were 300,000 unplanned pregnancies and of these, approximately 106,000 women chose pregnancy termination." (SOGC, 2010, slide 6) Clearly, not every unintended pregnancy is unwelcome, and no such assumptions are made here. The ability to plan and prepare for pregnancy and parenting, however, provides for more favourable outcomes in every respect.

- Some may regard this initiative as exclusively heterosexual in its focus, but it reflects broader considerations. There are other therapeutic benefits of hormonal contraception that apply to women regardless of sexual orientation. In this regard, universal access may have a positive complementary impact on both health care costs and the access afforded to low income women who might otherwise forego the therapeutic benefit. As well, the broad social issues of sexual and cultural diversity in the province carry with them unique needs and concerns with respect to sexual and reproductive care, of which pregnancy planning and reproductive rights are important components.

The Health Impact of Unintended Pregnancy

Women who experience an unintended pregnancy are unlikely to have prepared nutritionally (e.g. Folic acid) or to have ceased consuming alcohol or smoking in anticipation. Unintended pregnancy precludes the opportunity to receive preconception care that may improve pregnancy outcomes. Women with an unintended pregnancy are at greater risk for physical abuse and depression. Couples experiencing unintended pregnancy are more likely to end their relationship, and they may forfeit their educational and professional aspirations (Brown & Eisenberg, 1995, pp. 50-90).

When the decision is made to continue an unintended pregnancy, and then to parent, the consequences include potential adverse effects for children and their parents. Unintended pregnancy is associated with later entry into prenatal care, a lower number of total prenatal visits, tobacco and alcohol use during pregnancy, low birth weight, infant mortality, child abuse, and insufficient resources for child development (Brown & Eisenberg, 1995, pp. 50-90).

Reduced Risk of Cancer

The Society of Obstetricians and Gynecologists of Canada's 2008 Position Statement on "the Birth Control Pill and Cancer" notes the following benefits:

- Review of relevant studies by SOGC experts indicates that oral contraceptives reduce the risk of ovarian and uterine cancer.
- Oral contraceptives have been proven to reduce rates of endometrial and ovarian cancer by 50% or more. This benefit increases with duration of use and persists for up to 20 years after oral contraceptives are stopped (SOGC, 2008).

Other Therapeutic Benefits

In addition to providing reliable contraception, oral contraceptives have numerous non-contraceptive benefits which have afforded relief to millions of women suffering from dysmenorrhea (painful menstruation), menorrhagia (heavy menstrual flow), premenstrual syndrome, acne, unwanted hair growth, pelvic pain due to endometriosis, and iron deficiency anemia. (SOGC, 2008)

Reducing the Risks Associated with Pregnancy and Childbirth

Contraceptives are safe. Women are far more likely to die from pregnancy related complications, from automobile accidents or from a fall than they are from using contraception.

The SOGC also notes that "The risks of pregnancy are substantial, and failure to use contraception due to unfounded, ill-advised fears about the side effects of hormones may do far more harm to women than any of the purported adverse effects of the contraceptive method."

Reducing the Risks Associated with Unsafe Abortion

We need to recognize that for various reasons, including threats to confidentiality and severe limitations on access to abortion services in remote parts of BC, women may seek abortion from an unsafe provider or procedure. One step toward reducing this risk is to eliminate barriers to accessing contraception.

Supporting Family Planning is Good Social Policy

There is a close link between social impact and economic benefit (see Appendices B and D). Improving the opportunities for academic and employment success for young adults has the dual effect of enhancing the economic and tax base, and reducing social support expenditures. A significant factor in this equation is preventing the interruption in education and employment preparation, whether immediate or long-term, which often result from unplanned young parenthood.

Social values in BC appear to favour movement toward universal coverage of contraception. McIntyre Mustel Omnibus polls commissioned by the Planned Parenthood Association of BC in 2001 indicated strong support for the corollary issues of government-supported comprehensive sexual health education and clinical services. Similar polling data are needed to update our knowledge of the social value sets involved, particularly around the coverage proposal. There may be an opportunity to portray universal coverage as a natural extension of the educational and clinical programs already in place.

Some parents hold the view that their children's health is their responsibility, and will not react well to the possibility that their children could access contraception at no cost and in complete confidence. We should expect this view to generate pressure for tightening the current provisions of the Infant Act allowing a child to seek medical care without parental consent. That would be a serious setback to the wellbeing of young people.

We need to determine whether the values reported to be encountered in the social assistance system (if a partner is in the picture some support is assumed, so there is no need for subsidized contraception) are official, widespread and supported or rejected by the public at large

There is every reason to expect that universal coverage of contraception will reduce the demand for abortion services. This is a multi-layered perspective, however, and its nuances need to be clearly understood.

- Publicly funded contraception is not a legitimate opportunity to constrain the right of access to abortion services. In equal measure, the measure should be supported by support for the right not to use contraception, whatever the consequences of that decision.

- Any notion that a reduction in demand for abortion would provide room to reduce the Government's budgetary commitment to abortion services is a false dichotomy. In the first place, geographic access to abortion services remains a significant unresolved issue in the province. Second, the cost benefit of reduced

demand is in the fact that for the cost of one abortion two women's contraceptive coverage would be paid for a full year.

- Reduced demand for abortion will not result in any significant ground gained with the anti-choice faction, because many of them are also opposed to contraception. Instead, this entire measure is an opportunity to challenge opponents to support the same objectives as the coverage proposal with alternative strategies.

Misinformation Makes Poor Policy: Myths and Facts

Myth: Eliminating the cost of contraceptives will have no impact on use.

Fact: the cost of contraception is a barrier to use in women who would otherwise use it. The research on pricing and access shows two important things. The first is that access is negatively affected by cost. The other is that free contraception is not necessarily the only route to improving and supporting contraceptive use; the research indicates that there is little difference is use between free contraceptives and those that are priced to be very affordable. Providing free contraception is, however, administratively more economical than collecting revenues and monitoring price compliance.

Myth: Contraceptives, especially The Pill (oral contraception), Depo-Provera, IUDs, and Emergency Contraception cause abortion (Flynn, 2005, paras 13-19).

Fact: Oral Contraceptive Pills do not cause abortion.
Continuing to take the birth control pill before or after a pregnancy is confirmed will not abort the fetus. There is no evidence that taking the pill will have an effect on fetal development. Oral contraceptives do not cause miscarriages because they do not work in that way. Rather, they prevent pregnancy by inhibiting ovulation or causing the cervical mucus to thicken.

Fact: IUDs do not cause abortion.
IUDs prevent pregnancy. The leading brands of IUDs, for example, work by keeping a woman's egg and a man's sperm from meeting. One mechanism is the use of copper, which repels sperm, so they don't have a chance to fertilize an egg. The other is hormonal thickening of the cervical mucus. This prevents sperm from reaching the uterus (Association of Health Professionals, 2010).

Fact: Depo-Provera does not cause abortion.
Depo-Provera prevents an ovary from releasing an egg, thereby preventing pregnancy. Depo-Provera given to a woman who is already pregnant will not cause an abortion

Fact: Emergency Contraception does not cause abortion.
Emergency contraception prevents pregnancy by either temporarily stopping ovulation, preventing fertilization, or preventing an egg from attaching to the uterus. Plan B will not work if taken when already pregnant, but if it is taken after a pregnancy has occurred, there is no evidence that it will harm the developing embryo (Ottawa Hospital, 2003).

Myth: The "Rhythm Method" or "Fertility Awareness" is an effective, reliable form of preventing pregnancy (Flynn, 2005, para 55).

Fact: The Rhythm Method is ineffective in preventing pregnancy.
The Rhythm Method has a high failure rate: up to 20 out of 100 women using this method will become pregnant every year (Black, 2004), particularly when compared to contraceptives. Fertility awareness relies on knowledge of both male and female reproduction and on an unerring ability to predict ovulation. Although a kit can be purchased to help detect ovulation, the prediction timeframe for when ovulation is expected is too broad to reliably prevent pregnancy (Epigee, 2009).

Myth: Studies show that greater access to contraception does not reduce unintended pregnancy and abortion (Conference of Catholic Bishops, n.d.)

Fact: The level of unintended pregnancy is lowest in countries with greatest access to effective methods of contraception and where women play a major role in family decision-making UNPF, n.d. para. 10)

Myth: Studies link increased access to contraceptives to an increase in Sexually Transmitted Infections (STIs) (Conference of Catholic Bishops, n.d.)

Fact: Studies link increased access to contraceptives to a decrease in STIs, unintended pregnancies, and abortion. Contraceptive use has vastly improved maternal and infant health and has been the driving force in reducing national rates of unintended pregnancies, STIs and abortions (NFPRHA, 2007, para. 6)

Myth: Studies link increased breast cancer risk to oral contraceptive use (Stacey, 2007, # 10).

Fact: The medical literature remains contradictory on this issue. While some studies have shown a slightly increased risk of breast cancer with oral contraceptive use, others report no significant association. For example, an article published in the 2009 American Journal of Epidemiology assessed the relationship of oral contraceptive use to breast cancer risk among 907 case women with incident invasive breast cancer and found a slightly increased risk of breast cancer associated with at least one year of contraceptive use (Coogan, 2009). This contrasts with the much larger Women's Contraceptive and Reproductive Experiences (CARE) Study which was a population-based case–control study conducted in 5 US sites involving over 9000 participants. This study established that no significant association exists between oral contraceptive use and breast cancer (National Cancer Institute, 2006).

Myth: Oral contraceptives cause birth defects (Stacey, 2007, # 3).

Fact: While there are risk factors for women who take oral contraceptives (especially women who are smokers), there is no scientific evidence to suggest that oral contraceptives increase the incidence of birth defects (Stacey, 2007, # 3).

Myth: Long term contraceptive use can affect fertility (Stacey, 2007, # 4).

Fact: There is no clinical evidence that oral contraception affects fertility. Should a woman wish to become pregnant, she should stop taking her birth control pills. A rapid return to fertility (4-6 weeks) usually occurs with oral contraceptives; Depo Provera may involve a few weeks longer (Stacey, 2007, # 4).

Myth: Access to contraception encourages earlier and more frequent sexual activity.

Fact: The key issue is not access to contraception, but reliable comprehensive sexual health education. A World Health Organization (WHO) review of studies on sexuality education found that access to counseling and contraceptive services did not encourage earlier or increased sexual activity. A UNAIDS review (1997) concluded that sex education programs do not lead to earlier or increased sexual activity among young people; in fact the opposite seems to be true. 22 out of 53 studies reviewed reported that sexual health education either delayed the onset of sexual activity, reduced the number of sexual partners or reduced unplanned pregnancies and STI rates. These findings are supported research conducted with adolescents by BC's McCreary Centre Society.

Myth: Adolescent access to contraception without parental involvement interferes with parental control over children's behaviour.

Fact: Parents have a vital role in imparting personal values to their children. But only 20% of parents report being comfortable educating their children about sex. Limiting access to sexual health knowledge and services will put adolescents' health and safety at risk. Permitting and encouraging them to do so with trusted health care professionals helps them develop the skills needed to become healthy adults (English, 2007, Para 6). Many adolescents are cognitively and emotionally mature enough to understand the consequences of their actions regarding health concerns and are capable of giving informed consent to health care. This is recognized in the law.

Delivery of a Universal Coverage Program: Framework Considerations

Whatever model we select, it is recommended that we test its impact in a five-year pilot project. This approach would also provide time and experience to adjust the logistics of program delivery. The caution would be not to leave room for the government of the day to cancel the project; it would seem to be imperative that we start from the foundation of a clear commitment to universal access. There are several dimensions to the design of a delivery program for universal access to contraception:

Meeting the Individual's Needs:

- An individual's contraceptive needs must be determined (and adjusted) through a reliable clinical protocol without regard to cost.

- Fully informed choice and consent must be at the core of the interaction with individuals.

- Current provisions for medical confidentiality must be maintained. This would include current arrangements for exclusion of information about a child's access to contraception from the family health records maintained by the Medical Services Plan, in the event of a family review.

- Whatever the model adopted, it must continue to promote access to all the other sexual and reproductive health services individuals may require. Corollary to this is the importance of providing clear preventive information with respect to sexually transmitted infections.

- A system of up-front payment by the client and subsequent reimbursement may constitute an access barrier for some women. The possibility that some women

may only obtain one cycle of contraception at a time could affect consistency of use and will certainly increase the cost of administering the program.

Meeting Taxpayers' Expectations:

- Public administration of a universal access program must meet the tests of economy, cost control, accountability and privacy. Opt has established its ability to meet those tests, and should be seen as a potential alternative to bureaucratic management.

- The supply cost of contraceptives is potentially under the control of manufacturers, but even Opt has sufficient buying power to curb most attempts to overcharge. The bulk purchasing power of the Province is considerably greater and can only improve as the merits of universal coverage spread to other Provinces.

Distribution:

- The ability previously given to pharmacists to prescribe Plan B, and the authority given to nurse practitioners, registered nurses and midwives to dispense contraceptives are indications of the flexibility that can be brought to bear on the distribution process to improve access.

- Payment for distribution services will be a major item of discussion and negotiation, particularly with pharmacists. The provisions offered to pharmacists around Plan B (a reduced pharmacy fee in exchange for a streamlined payment process) may be a helpful precedent in this regard.

- There is an opportunity to extend the distribution network by engaging at least some workplace-based health and employee support programs (those with registered nursing or physician services) in the delivery of an important new dimension of service and relevance.

Contraceptive Options Covered:

- This proposal recommends coverage of all contraceptive options available.

- Washington's "Take Charge" program offers a full range of contraceptive options. If constraints are necessary they should be based on the comparative cost-effectiveness of options available rather than the initial outlay. For example, an IUD costing $200 for three years' contraceptive protection may compare favourably with a monthly oral contraceptive costing $72 a year.

- In 2003 the Planned Parenthood of Columbia/ Willamette in Oregon introduced a Web-based prescription service providing a 60-day supply of some hormonal contraceptives (the pill, the patch and the Nuva ring). (Health Technologies Project, 2003, p. 3) The products are not free of charge, but the program enhances access in other ways (see Appendix B). This service depends on state law that permits remote patient assessment by a nurse practitioner or physician.

- The Society of Obstetricians and Gynecologists of Canada operates a Compassionate Contraceptive Assistance Program for women in Canada for whom financial hardship is a barrier to access. Access is obtained through the woman's health care provider, as long as the provider is registered with the Program and has prescribing authority. The program is limited to hormonal contraceptive options, but there are no declared limits on the number of requests that may be made on a patient's behalf.

- The European programs vary with respect to the range of products covered and the benefits available to the population, but none is particularly restrictive.

Making the Public Aware of the Program

- Social marketing strategies as well as traditional advertising and media approaches should be considered. Highlighting the economic, health, social, public expenditure reduction and other benefits will be an important feature of the messaging.

- It will be essential to identify definitive sources for reliable and comprehensive information and referral, and for all key stakeholders to support and promote those sources.

- Criticisms of the program on moral and religious grounds are inevitable. It will be important to stress that reproductive choice is a matter of individual belief and behaviour, but that evidence and experience from around the world support the value of public policy that facilitates access to contraception.

Appendix A: Estimating the Audience for the Program

Setting the Population Base

The purpose of this analysis is to establish an upper limit value for the number of British Columbians likely to take advantage of publicly funded contraception. The approach considers four components to the base: females 10 to 14 years of age, women 15 to 19 years old, women 20 to 44 years of age, and women 45 and older. 2007 population data for these groups come from BC Statistics.

The 10-14 age group shows a slight but steady decline over the past decade, with an average of 127,000 per year. Because of the trend, the 2007 data have been used. The 15-19 age group shows steady growth of 2% or more over the decade, so to render the data current, the 2007 figure of 137,569 has been adjusted by 6% to 146,000. The 20 to 44 age group is quite static over the decade so the 2007 figure has been used. The 45+ group shows steady growth of 2% or more over the decade, so to render the data current, the 2007 figure of 497,131 has been adjusted by 6% to 527,000.

Age 10 to 14	124,000
Age 15 to 19	146,000
Age 20 to 44	752,000
Age 45 +	527,000
Total	1,549,000

This total is meant to represent the base in 2010 from which subsequent calculations are drawn.

Calculating an Estimated Audience

10-14 year-Olds

To estimate the audience in the **10-14** age group, we draw on data from the 2008 BC Adolescent Health Survey published by the McCreary Centre Society. The survey records that 19% of youth aged 14 and under report having sex (MCS, 2008, p. 38). This is somewhat higher than similar data from the US indicating that only 13% of teens have ever had sex by age 15 (Guttmacher Institute, 2010), so the McCreary data will serve as an upper range in this analysis. The data include sexual activity other than intercourse, but they are a relevant reflection of risk behaviour. The survey does not break out male and female responses in this regard, but corollary data on oral sex indicate that percentages for males and females are comparable (MCS, 2008, p. 39). Therefore, this analysis assumes the 19% figure to be a reasonable baseline of the female population in this age group having sex; that represents 23,600 of our baseline population.

Of the sexually active group, a maximum of 26% report using oral contraceptives, and 66% report using condoms (the proportion increases from 11% and 38% respectively at age 11) (MCS, 2008, p. 40). The upper range for condom use is taken as the basis for calculating the potential audience of 10-14 year-olds at 15,600. To estimate individuals in this age group for whom hormonal contraceptives may be prescribed for therapeutic reasons the number is rounded up to **16,000.**

15-19 Year-Olds

The McCreary data are also helpful in estimating the audience in the **15-19** age group, but more extrapolation is needed. The 2008 survey does not include the percentage of older adolescents who report having sex, only that "the percentage of youth that reported having had sexual intercourse was identical for males and females (22%) and increased with age" (MCS, 2008, p. 38). By comparison, 26% of all youth report having had oral sex, and between 15 and 18, this percentage rises from 36% to 52% (MCS, 2008, p. 39) Again, the Guttmacher figures for US youth 15-19 years old is somewhat lower at 46% (Guttmacher, 2010)

The first assumption used here is that oral sex reflects relevant risk behaviour, including intercourse. The second assumption is that it would be prudent to use the higher percentage to estimate numbers, so 52% of this age group, **76,000**, is deemed to be the potential audience.

20-44 Year Olds

Little other information is available on contraceptive use in BC by age group, but a recent national study is of value in assessing the potential audience that would benefit from publicly funded contraception in the **20-44** age group. In a 2009 study of contraceptive use among Canadian women of reproductive age, Amanda Black *et al* sampled 5,597 sexually active women aged 15 to 50. After applying exclusions for same sex respondents, those who never use contraception, those actively seeking to get pregnant and other ineligibility factors, the study cohort numbered 2341 women, or 41.8% of the original sample (Black, 2009, p. 629). This percentage serves as a guide for calculating the first level of potential audience of 20-44 year-olds at 314,000.

Black et al also report that 13.4% of women using contraception rely on permanent male or female sterilization, and 1% have had hysterectomies Black, 2009, p. 632). Since both sterilization procedures are covered under the Medical Services Plan, the incremental impact of these factors would bring the baseline audience down to approximately **269,000** women.

In the 45+ age group we have seen a constant pregnancy rate over the past decade of 0.3 per thousand BC women (166 pregnancies in 2007) (BC Statistics). Even assuming that all of those pregnancies were unintended, the number is considered to be inconsequential for estimating our audience.

Guttmacher reports that 50% of women 40-45 who practice contraception have been sterilized and another 18% rely on their partner's sterilization (Guttmacher, 2008). The Canadian data point to a lower percentage, 36%, that represents a useful adjustment factor (Black, 2009, p. 632). This would reduce the potential audience to about 337,000. Applying the exclusion criteria used in the Black et al study to this group would reduce the potential audience to **141,000.** This number ultimately needs to be assessed against the number of women in the age group who are using hormonal contraception for therapeutic purposes. Pending further data, this will be assumed to be included in the 141,00.

From this analysis, the total estimated (annual) audience for publicly funded contraception is **502,000** women.

Appendix B: Calculating the Public Expenditure Equation for Publicly Funded Contraception

The following assumptions are used to arrive at a baseline direct cost exclusive of administration costs and cost and revenue offsets:

- The potential audience for publicly funded contraception in BC is in the order of 502,000 women (see Appendix A: Estimating the Audience for the Program). We do not know how many of these potentially eligible women will not choose to access a publicly funded contraception program, but by assuming that all of them will, an outer limit on program cost can be assessed.

- Through not-for-profit providers like Options for Sexual Health and the Island Sexual Health Society, a full year's contraception for a woman in BC, ranges in cost from $65 to $240. The monthly direct cost per individual is based on a weighted average reflecting the profile of products purchased through Opt's network of clinics (sample size of over 28,000 clients), the duration of contraceptive protection involved with each product, and the manufacturers' selling price to Opt. The result is a monthly estimated cost of $8.47 per person. This translates into an annual cost of $104.40 per individual.

Using these assumptions the maximum potential incremental cost of publicly funded contraception in BC is estimated to be $52.4 million per annum. This represents a mere 0.32% of the Provincial Government's current health expenditure plans (estimated 2012-13 budget: $16.127 billion)

Extrapolating from the Guttmacher analysis, the target impact of a BC program would be to save in the order of $176 million in public expenditure. Can this be realized? We need to acknowledge that the performance of the US health system is less efficient than BC's, and that as a result, applying good policy has a more dramatic effect. We estimate that a conservative target in our context would be to achieve at least a two-fold return.

- A 15% reduction in abortions (total 12,265: 2007 BC Statistics data) for a procedure that costs the health system a minimum of $450 represents about $820,000 annually in reduced public expenditure.

- In 2004-05 the cost of prenatal visits in BC was among the top 50 items out of all MSP service fee claims. (CIHI, 2006, p. 5). A 15% reduction in births (total 43,410: 2007 BC Statistics data) would yield significant savings. The average delivery without complications and follow-up newborn care result in approximately $4000 of public expenditure (2003 data) (CIHI, 2006, pp 13, 21, 25), representing at minimum a $26 million annual reduction in public

expenditure. Savings in prenatal care would represent an additional $1.5 million or more.

- Significantly enhancing access to contraception will also provide health promotion opportunities with respect to the benefits of cervical screening, in support of the province's cervical screening goals. Earlier detection of pathology in a higher proportion of women will reduce downstream treatment expenditure.

- The social support costs related to adolescent pregnancy and parenting are significant; the cost of raising a child to age 18 is calculated at $167,000, of which $10,000 is needed in the first year alone (Manitoba Agriculture, 2004). Adjusting the 2007 data of 1466 live births among 15-19 year-olds to reflect the 15% reduction estimated above would leave 1246 births. Assuming that 20% of those children and their parent(s) depend on social supports, the situation represents $41 million over the calculated period for just that one-year cohort. This is on top of the $25.6 million annual saving that has been realized by the past decade's efforts to reduce adolescent pregnancy (see Appendix D).

The total impact of publicly funded contraception is estimated to be a minimum of **$95 million annually.**

Appendix C: Examples of Program Delivery Models

The Global Perspective

Many other countries already subsidize, in full or in part, universal access to contraception (examples include the UK, France, Spain, Sweden, Denmark, the Netherlands, Italy and Germany). A useful summary of these programs is in a September 2009 Fact Sheet on European Standards on Subsidizing Contraception. (Centre for reproductive Rights, 2009))

Washington State's "Take Charge" Program

This is a state government program that extends Medicare coverage for a range of family planning services to persons with limited income (up to 200% of the federal poverty level (200% below or lower). Under the overall goal of improving public health, the intent of the program is to reduce Medicaid costs of unplanned pregnancies and their consequences.

The program is in effect a state-run insurance plan through the Health and recovery Services Administration of the Department of Social and Health Services. The overall plan covers a range of health services; "Take Charge" is one element of the plan.

Services covered include counseling, annual examinations and Pap tests, prescriptions for FDA-approved contraception, barrier contraceptives and spermicide, tubal ligations, and vasectomy. In the first five years of operation, over 400,000 women and men accessed the program through a network of 200 clinical sites. Many of those sites are Planned Parenthood clinics.

Planned Parenthood of the Great Northwest, headquartered in Seattle, noted that the program lost some of its effectiveness when related funding for STI counseling and care was removed from the program in government budget cuts. The group emphasized the value of having contraceptive distribution as a window of opportunity for engagement with the client on other sexual and reproductive health matters.

Planned Parenthood of Columbia/ Willamette – On-Line Contraception

The Planned Parenthood of Columbia/ Willamette (PPCW) introduced a Web-based contraceptive prescription and delivery service in 2003. In the initial trial of the service, the focus was on emergency contraception. Currently, the program provides a 60-day supply of some hormonal contraceptives (the pill, the patch and the Nuva ring). Demand for EC has fallen off considerably with the change in status to a non-prescription product.

The client completes an on-line health assessment and a nurse practitioner follows up by telephone. On approval, the client can receive her contraceptives by overnight mail, at a pharmacy, or from a Planned Parenthood clinic.

The service does not provide free contraception, and there is also a consultation fee involved. PPCW reports that the intent was to make access very convenient, particularly for lower socio-economic status women and those in more remote and rural areas of the state. Although the service is covered by Medicaid, the profile of clients has gradually shifted to women who can afford to pay for the convenience the service offers. A significant number of clients are from rural areas.

Appendix D: The Early Child Development Case for Preventing Adolescent Pregnancy

A Presentation to the BC Association of Pregnancy Outreach Programs by Options for Sexual Health, Vancouver, May 29, 2006

At first blush it might seem counter-intuitive to argue the wisdom of supporting programs that reduce adolescent pregnancy by pointing out the benefits for early childhood development. There is, arguably, a strong conceptual association between the two issues that goes back to the familiar refrain of decades ago – "Every child a wanted child" – and is echoed in such current rhetoric as "No child left behind" and "Success by Six". In fact, every dollar we do not have to spend addressing the consequences of unplanned adolescent pregnancy is money we can spend on early childhood development programming. So, what does the cost-benefit picture look like?

Well-documented analysis supports the claim that preventive education and services save millions of dollars in subsequent acute health care and social service system costs, including social assistance payments. Figures abound for the cost of raising a child, for example. We know that all young parents don't require the full array of social supports, but we know the value of maintaining their economic well-being so they can complete school, learn job skills, and child rear effectively. Costs vary according to the needs of the parent and child, but the cost of income support alone for a young single parent and child was estimated several years ago at approximately $82,000 by the time the child reaches elementary school (age 0 to 6), about $18,600 a year.

Health Canada's Framework for Sexual and Reproductive Health (1999) cited earlier findings that "for every dollar spent on preventing teenage pregnancy, $10 could be saved on the cost of abortion services and the short and long term costs of income maintenance to adolescent sole support parents".

What would numbers like this mean if BC had not seen in the past decade significantly reduced rates of adolescent pregnancy and live births to adolescent mothers? Consider these data: (source: BC Statistics)

- The pregnancy rate among 15-19 year-olds in 1994 was 52.3 per thousand. In a population of 112,917 young women, the number of pregnancies was 5,900.

- The pregnancy rate among 15-19 year-olds in 2004 was 28.6 per thousand. In a population of 135,717 young women, the number of pregnancies was 3,883.

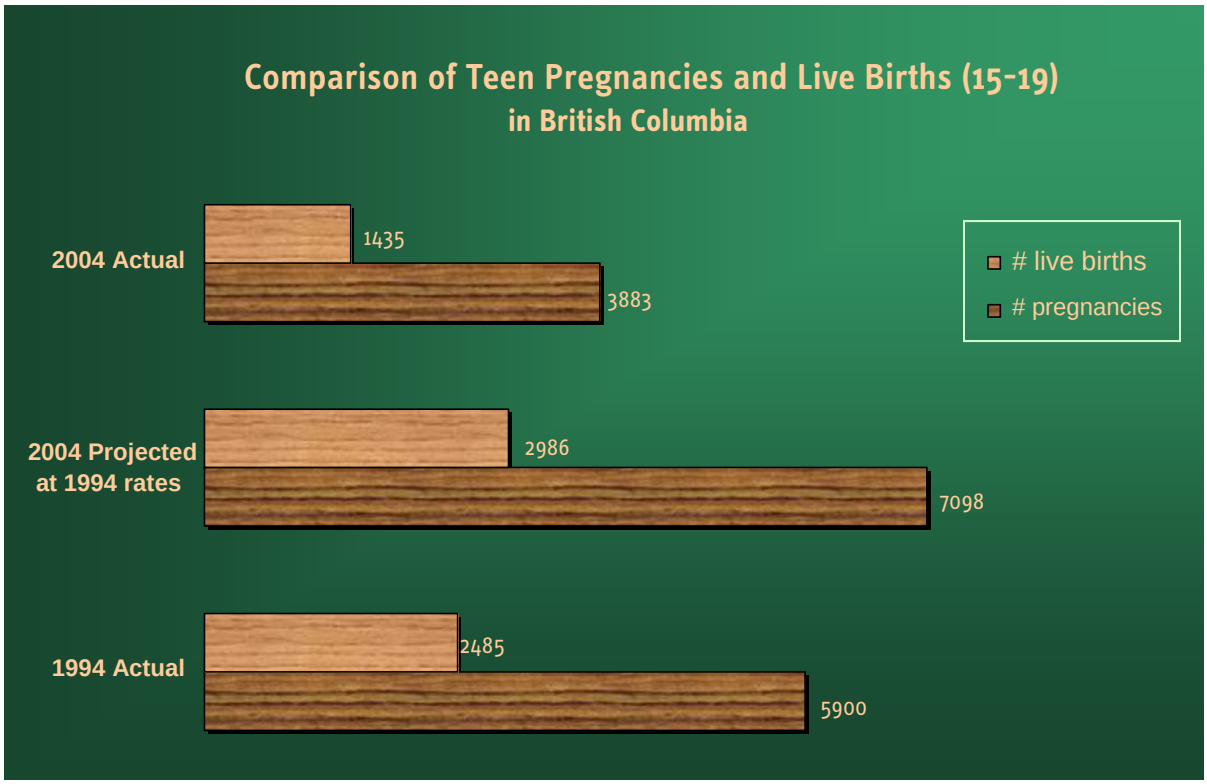
- If we had made no progress in reducing adolescent pregnancy rates in that time period, the rate of 52.3 per 1000 applied to the 2004 population would have yielded 7,097 pregnancies that year, a difference of 3,214 from the actual number.

In a similar vein:

- The live birth rate among 15-19 year-olds was 22.0 per thousand in 1994. That translated into 2,485 live births.

- The live birth rate among 15-19 year-olds was 10.5 per thousand in 2004. That represented 1,425 live births.

- In the absence of enhanced contraceptive services, preventive education and access to reproductive choice, the 1994 rate of live births applied to the 2004 population of adolescent women would have resulted in 2,985 live births, a difference of 1,560 from the actual number.



If we assume that even 20% of those 1560 additional births fell into the category of requiring full income support for mother and child, the savings from 2004 alone can be conservatively estimated at about $25.6 million over the first six years of life of just that one year's cohort of babies. That translates into a continuing annual saving after just six cohorts.

That impact is multiplied by the results year by year of BC's success at reducing unplanned pregnancies. It is clear that preventive sexual health programming is a powerful generator of social investment potential. These numbers don't even touch on the cost of dealing with those adolescent pregnancies that do not go to term or result in an adoption, whether from the perspective of pregnancy termination and related health services required, the regulation and management of adoption, or the other social, educational, and other supports required to assist young women during the experience of an unplanned pregnancy.

References

Alan Guttmacher Institute. (2005). *The Guttmacher Report on Public Policy: Promoting Prevention to Reduce the Need for Abortion: Good Policy, Good Politics.* New York, New York. Alan Guttmacher Institute.

Alan Guttmacher Institute. (2008). *Facts on Contraceptive Use.* New York, New York. Alan Guttmacher Institute.

Alan Guttmacher Institute. (2009). *Facts on Publicly Funded Contraception Services in the United States.* New York, New York. Alan Guttmacher Institute.

Association of Health Professionals. Understanding IUDs. Retrieved on May 19, 2010 from http://www.arhp.org/Publications-and-resources/Patient-resources/printed-materials/Understanding-IUDs.

BC Centre for Disease Control. (2009) *BC Harm Reduction Strategies and Services Policy and Guidelines.* Vancouver BC. BC Centre for Disease Control.

BC Provincial Health Officer. (2002). *Annual Report 2002.* Victoria BC.

BC Provincial Health Officer. (2006). *Annual Report 2006: An Ounce of Prevention.* Victoria BC.

Biggs, M. A., Brindis, C., Darney, P., Green Foster, D., Hulett, D., Rostovtseva, D. (2009). Cost Savings from the Provision of Specific Methods of Contraception in a Publicly Funded Program. *American Journal of Public Health, Volume 99, Number 3, March 2009,* 446-451.

Bimkowska, K., Debski, R., Dynowski, K. (2005). Contraception Usage Over the Age of Forty in Polish Female Population Aged 45-54. *The European Journal of Contraception and Public Health; Volume 10, Issue 2,* 79-86.

Black, A., Fisher, W., Guilbert, E., Lalonde, A., Wen, S. W., Yang, Q. (2009). Contraceptive Use Among Canadian Women of Reproductive Age: Results of a National Survey. *Journal of Obstetrics and Gynaecology Canada, 2009:31 (7),* 627-640.

Black, A., Francoeur, D., Rowe, T. (2004) Canadian Contraception Consensus. *Journal of Obstetrics and Gynaecology Canada, 2004:26 (4)* 347-387.

British Columbia Ministry of Housing and Social Development. (2010) *Information Bulletin: Province Protects Services for Low-Income Clients.* Victoria. Government of British Columbia.

Brown, S. and Eisenberg, L. editors (2005). *The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families.* Washington DC: Institute of Medicine.

Canadian Council for Social Development. (2004). *Stats & Facts. Families: A Canadian Profile.* Ottawa. Canadian Council for Social Development.

Canadian Institute for Health Information. (2006). *Giving Birth in Canada: The Costs*. Ottawa. Canadian Institute for Health Information.

Centre for Reproductive Rights (2009). *Factsheet: European Standards on Subsidizing Contraceptives.* New York, New York. Centre for Reproductive Rights

Coogan,P.F., Palmer, J.R., Rosenberg, L., Strom, B.L., Zhang, Y. 2009. A case- control study of oral contraceptive use and incident breast cancer. American Journal of Epidemiology, 169 (4), 473-479.

English, A., and Spears, S. (2007). Editorial. *Contraception Journal*, *August, 2007.* Para 6.

Epigee. (2009). *Rhythm Method*. Retrieved on May 19, 2010 from http://www.epigee.org/guide/rhythm.html.

Flynn, J.T. 2008. *Birth Control Pills Cause Early Abortions.* Retrieved on May 19, 2010 from http://www.prolife.com/BIRTHCNT.html.

Forrest, J. D., Singh, S. (1990). Public-Sector Savings Resulting from Expenditures for Contraceptive Services in California. *Family Planning Perspectives 22 (4)*, 161.

Gold, R.B. (2006). *The Guttmacher Policy Review; Rekindling Efforts to Prevent Unplanned Pregnancy: A matter of "Equity and Common Sense"*. New York, New York. Alan Guttmacher Institute.

Gustaffson, B., Persson, E., Van Rooijen, M. (1994). Subsidizing Contraception for Young People in Sweden. *Plan Parenthood Europe, Volume 23, Number 1*, 2-4.

Health Canada. (1999) *Report on Consultations on a Framework for Sexual and Reproductive Health.* Ottawa. Queen's Printer.

Manitoba Agriculture, Food and Rural Initiatives. (2004). *The Cost of Raising a Girl to Age 18, 2004.The Cost of Raising a Boy to Age 18, 2004.* Retrieved from http://www.ccsd.ca/factsheets/.

Mavranezouli, I. (2009). The Economics of Contraception. Retrieved from http://www.thefreelibrary.com/the+economics+of+contraception.-a0204073872.

McCreary Centre Society (2009). *A Picture of Health: Highlights from the 2008 BC Adolescent Health Survey, 2009*, Vancouver BC. McCreary Centre Society.

National Cancer Institute. (2006). *Fact Sheet: Oral Contraceptives and Cancer Risk: Questions and Answers.* Washington D.C. National Cancer Institute.

National Family Planning and reproductive Health Association. (2007). Support "Prevention First". Retrieved from http://www.nfprha.org/images/pdf/facts/Prevention_First.pdf.

Options for Sexual Health (2007). *The Early Child Development Case for Preventing Adolescent Pregnancy: A Presentation to the BC Association of Pregnancy Outreach Programs.* Vancouver BC. Options for Sexual Health.

Ottawa Hospital (2003). *Contraception Clinic – FAQ.* Retrieved from http://www.ottawahospital.on.ca/sc/whc/clinics/faq-contraception-e.asp.

Planned Parenthood Association of BC. (1999) *Subsidized Contraception of Subsidized Babies: Meeting the Reproductive Health Care Needs of British Columbia Youth*.Vancouver. Planned Parenthood Association of BC.

Public Health Agency of Canada. (1999) *Healthy Development of Children and Youth: The Role of Determinants of Health.* Ottawa. Queen's Printer

Reproductive Health Technologies Project. (2003). *Conference Report: The Unfinished Revolution in Contraception: Convenience, Consumer Access and Choice.* Washington DC. Reproductive Health Technologies Project.

Singh, K. and Wong, M.T. (2003). The Combined Oral Contraceptive Pill in Women Over Forty. *Annals Academy of Medicine, 32,* 624-631.

Society of Obstetricians and Gynecologists of Canada (2008). "The Birth Control Pill and Cancer". Ottawa. Society of Obstetricians and Gynecologists of Canada.

Society of Obstetricians and Gynecologists of Canada. (2010) *Contraception Awareness Program and Website; Presentation Transcript*. Retrieved on May 19, 2010 from http://www.slideshare.net/ISHN/sogc-contraception-awareness-program-website.

Stacey, D. (2007). *Top 10 Pill Myths*. Retrieved on May 19, 2010 from http://www.contraception.about.com/od/contraceptionmyths/tp/pillmyths.htm.

United Nations Population Fund (n.d.). Reproductive Health. Retrieved on May 19, 2010 from http://www.unfpa.org/rh/planning.htm

United States Conference of Catholic Bishops. (n.d.). *Fact Sheet: Greater Access to Contraception Does Not Reduce Abortions.* Retrieved on May 19, 2010 from http://www.usccb.org/prolife/issues/contraception/contrafact sheet0207.shtml.

Washington Department of Social and Health Services. (2006). *TAKE CHARGE: Final Evaluation, First Five Years: July 2001-June 2006.* Olympia, WA.