

Preconception Health Care Tool

Preconception Health Care involves identifying potential physical, genetic, psychosocial, environmental, and behavioural risk factors for adverse pregnancy outcomes, and reducing those risks prior to conception through counselling, education, and intervention. Preconception Health Care focuses on health promotion and illness prevention for everyone of reproductive age. It is an important opportunity for primary care providers to improve maternal and infant outcomes, as the critical period for fetal development often occurs before prenatal care begins. **Each of the preconception topics below should be addressed with every individual of reproductive age on an on-going basis.**

Patient Name: _____

Birth Date: _____ dd/mm/yy

Prevent & Promote	Screen	Manage
Reproductive Life Plan: Ask all individuals of reproductive age, "Would you like to have a child in the next year?" Encourage all individuals to make a Reproductive Life Plan ¹ . 🇨🇦 🇬🇧		
<input type="checkbox"/> No → Discuss contraception options. <input type="checkbox"/> Not sure → Choosing Wisely Tool ² 🇨🇦 🇬🇧 <input type="checkbox"/> Inform women of reproductive age that natural fertility and assisted reproductive technology success is significantly lower for women in their late 30-40s. 🇨🇦 🇬🇧	<input type="checkbox"/> Yes ⁴ 🇨🇦 🇬🇧 LMP: _____ <input type="checkbox"/> Discuss family planning and conception.	<input type="checkbox"/> If positive pregnancy test, discuss options for prenatal care and refer accordingly.
Reproductive History: A detailed reproductive history should be obtained for all individuals.		
Gravida (G): _____ Abortions (A): _____ Full-Term (T): _____ Living Children (L): _____ Premature (P): _____ Details: _____	Inquire about previous pregnancies: <input type="checkbox"/> Preterm Birth <input type="checkbox"/> Stillbirth <input type="checkbox"/> Gestational DM <input type="checkbox"/> Preeclampsia <input type="checkbox"/> Miscarriage <input type="checkbox"/> Caesarean Birth <input type="checkbox"/> Congenital Anomalies <input type="checkbox"/> Assisted Reproductive Technologies <input type="checkbox"/> High/Low Birth Weight	<input type="checkbox"/> Provide appropriate referrals. <input type="checkbox"/> Advise women with prior caesarean delivery to wait at least 18 months prior to conception. <input type="checkbox"/> Recommend folic acid 5mg daily prior to conception and for 12 weeks after conception if positive history of neural tube defect. <input type="checkbox"/> Recommend >18 and <59 month interpregnancy interval (IPI).
Sexual Health:		
All individuals should be counselled about safer sexual practice.	Screen if High Risk: <input type="checkbox"/> Chlamydia <input type="checkbox"/> Syphilis <input type="checkbox"/> Trichomoniasis <input type="checkbox"/> Gonorrhea <input type="checkbox"/> Genital Herpes (if lesions)	<input type="checkbox"/> Provide treatment according to Canadian Guidelines on Sexually Transmitted Infections ⁵ 🇨🇦 🇬🇧 <input type="checkbox"/> Inform women with genital herpes of risk of vertical transmission.
Chronic Medical Conditions: Optimize management for the following diseases, as suboptimal control or treatments can increase risk for adverse maternal and/or infant outcomes.		
Motherisk ⁶ 🇨🇦 🇬🇧 should be consulted for the safety of any medications taken by patients with chronic conditions. Motherisk Helpline: 1-877-439-2744 <input type="checkbox"/> Asthma: Delay conception until good control is achieved. <input type="checkbox"/> Cancer: All individuals with cancer should be counselled regarding the potential effects of treatment on fertility and informed of options to preserve fertility, if desired, and referred appropriately. <input type="checkbox"/> Diabetes: Increased risk of birth defects can be mitigated with good preconception glycemic control. Encourage contraception for those without good control. Folic acid 5mg daily prior to conception and for 12 weeks after conception. ACE-Is and statins are contraindicated. Estrogen-containing contraception options should be avoided for those with DM >20 years or target end-organ damage. <input type="checkbox"/> HIV: Transmission risk to fetus is ~2% with antiretroviral therapy. Efavirenz is contraindicated. Antiretroviral drugs may interfere with hormonal contraceptive methods. Refer to specialist. <input type="checkbox"/> Hypertension: Increased risk for adverse fetal and maternal outcomes. Assess for target-end organ damage in those with long-standing hypertension. Alternatives to ACE-Is are recommended	in women of reproductive age. Avoid estrogen-containing contraception options for women with severe hypertension. <input type="checkbox"/> Inflammatory Bowel Disease: Counsel women to delay conception until disease is in remission. Conception during active episode increases risk of miscarriage, premature delivery, still birth, or low birth weight. <input type="checkbox"/> Phenylketonuria: Encourage maintenance of low phenylalanine level during reproductive years and especially prior to conception. <input type="checkbox"/> Renal Disease: Encourage optimal control prior to conception, including normal BP. Use alternative to ACE-Is. Consult with specialist. <input type="checkbox"/> Seizure Disorder: Discuss potential pregnancy outcomes related to seizures and seizure medications. Take folic acid 4-5mg daily prior to conception and for 12 weeks after conception. Lowest dose of one medication recommended, when possible. Valproic acid, lithium, and topiramate are contraindicated. Many antiepileptic medications may interfere with hormonal contraceptive methods. <input type="checkbox"/> Systemic Lupus Erythematosus, Rheumatoid Arthritis, and other Autoimmune Diseases: Delay conception until good control is achieved. Discuss natural history of disease during/after	pregnancy. Cyclophosphamide, Methotrexate, and Leflunomide are contraindicated. Avoid estrogen-containing contraception options in women with SLE and positive/unknown antiphospholipid antibody. Discuss use of aspirin and heparin with rheumatologist for women with SLE and antiphospholipid antibody syndrome. <input type="checkbox"/> Thromboembolic Disease: Counsel women that risk for VTE during pregnancy and postpartum is increased, and many will require anticoagulation treatment. Coumadin is contraindicated. Avoid estrogen-containing contraceptive options. <input type="checkbox"/> Thyroid Disease: Achieve euthyroid state prior to conception. Women with hypothyroidism should increase their dose of levothyroxine by 30% as soon as pregnancy occurs. Radioactive iodine is contraindicated. Screen all women for CBC and TSH, prior to conception.
For more information regarding preconception chronic disease management, visit the Before, Between, & Beyond Pregnancy Preconception Care Clinical Toolkit ⁷ . 🇨🇦 🇬🇧		
Medications:		
Human teratogenicity risk is unknown for the majority of medications. Use caution when prescribing for women of reproductive age. Consult Motherisk ⁶ 🇨🇦 🇬🇧	Screen for teratogenic medication use: <input type="checkbox"/> Prescribed Medications <input type="checkbox"/> Over-the-Counter Medications <input type="checkbox"/> Complementary and Alternative Therapy (herbal, natural, weight loss, athletic products or supplements, etc.)	Potentially teratogenic medications should be changed to safer options. Women should be counselled not to stop prescribed medications without consulting with their provider. <input type="checkbox"/> Recommend folic acid 5mg daily prior to conception and for 12 weeks after conception for women taking folate antagonists (ex. methotrexate, sulfonamides, and antiepileptics).
Mental Health:		
Promote mental health wellness through adequate sleep, work-life balance, stress reduction and social connectedness.	Screen: <input type="checkbox"/> Depression ⁸ 🇨🇦 🇬🇧 <input type="checkbox"/> Screen for family history of mental health issues. <input type="checkbox"/> Anxiety ⁹ 🇨🇦 🇬🇧 <input type="checkbox"/> Other ¹⁰ 🇨🇦 🇬🇧	<input type="checkbox"/> Bipolar Disorder <input type="checkbox"/> Mood Disorder <input type="checkbox"/> Schizophrenia <input type="checkbox"/> Counsel women with mental health diagnoses of risks of pregnancy and relapse. Strategize management. <input type="checkbox"/> Stabilize/optimize mood and anxiety level; discuss risks and benefits of medications.
Tobacco Use:		
Encourage all individuals to be tobacco free prior to conception.	Screen: <input type="checkbox"/> Tobacco (all forms) <input type="checkbox"/> Tobacco Exposure (second-hand smoke)	<input type="checkbox"/> Provide brief intervention and provide appropriate referrals ¹¹ 🇨🇦 🇬🇧 <input type="checkbox"/> Inform women of available patient resources ¹² 🇨🇦 🇬🇧 and Smokers' Helpline 1-877-513-5333. <input type="checkbox"/> Consult Canadian Smoking Cessation Guidelines ¹³ 🇨🇦 🇬🇧 <input type="checkbox"/> Counsel women with tobacco addictions of risks of pregnancy and relapse. <input type="checkbox"/> Strategize management. <input type="checkbox"/> Recommend an extra 35 mg of vitamin C daily for smokers.

Prevent & Promote	Screen	Manage									
Alcohol and Other Substance Use:											
Encourage all individuals to be substance free prior to conception.	Screen: <input type="checkbox"/> Alcohol <input type="checkbox"/> Other Substances	<input type="checkbox"/> Provide brief intervention ¹⁴ 🇨🇦 and provide appropriate referrals. <input type="checkbox"/> Recommend folic acid 5mg daily prior to conception for those with addictions ¹⁵ 🇨🇦 🇮🇹 <input type="checkbox"/> Inform women of available patient resources ¹⁶ 🇨🇦 🇮🇹 and Drug and Alcohol Helpline 1-800-565-8603. <input type="checkbox"/> Consult low risk drinking guidelines ¹⁷ 🇨🇦 🇮🇹									
Immunizations: All individuals of reproductive age should have their immunization status reviewed and updated ¹⁸ 🇨🇦 as required.											
Vaccinate: <input type="checkbox"/> Varicella <input type="checkbox"/> HPV <input type="checkbox"/> Tetanus, <input type="checkbox"/> Measles, <input type="checkbox"/> Rubella <input type="checkbox"/> Influenza <input type="checkbox"/> Diphtheria, <input type="checkbox"/> Mumps <input type="checkbox"/> Hepatitis B <input type="checkbox"/> Pertussis	Screen for immunity: <input type="checkbox"/> Rubella <input type="checkbox"/> Hepatitis B <input type="checkbox"/> Varicella	<input type="checkbox"/> Provide all immunizations required prior to conception with the exception of the flu vaccine, which can be administered before and/or during pregnancy.									
Infectious Diseases: Prevention and screening of these infectious diseases ¹⁹ 🇨🇦 are important for those of reproductive age.											
<input type="checkbox"/> HIV <input type="checkbox"/> Hepatitis B <input type="checkbox"/> Tuberculosis <input type="checkbox"/> Toxoplasmosis <input type="checkbox"/> Parvovirus <input type="checkbox"/> Hepatitis C <input type="checkbox"/> Cytomegalovirus	Screen: <input type="checkbox"/> HIV Screen if High Risk: <input type="checkbox"/> Hepatitis C <input type="checkbox"/> Tuberculosis	<input type="checkbox"/> Inform women who screen positive for HIV, Hepatitis B or C of risk for vertical transmission, and offer appropriate treatment ²⁰ 🇨🇦 <input type="checkbox"/> Treat women with Tuberculosis prior to conception ²⁰ 🇨🇦									
Family and Genetic History:											
Obtain 3 generation family history to identify ²¹ 🇨🇦 🇮🇹: <input type="checkbox"/> Congenital malformations, birth defects. <input type="checkbox"/> Consanguinity (first cousins or closer). <input type="checkbox"/> Developmental delays, learning disabilities. <input type="checkbox"/> Children who died at a young age (may reveal a metabolic condition). <input type="checkbox"/> Ethnicity <input type="checkbox"/> History of sudden unexplained death (may indicate cardiomyopathy or metabolic condition). <input type="checkbox"/> Genetic disorders ²² 🇨🇦 🇮🇹 <input type="checkbox"/> Family history of a genetic condition. <input type="checkbox"/> History of infertility, multiple miscarriages (>3 or all male fetuses).	Ethnicity Based Screening Considerations ²³ 🇨🇦 🇮🇹: <input type="checkbox"/> CBC and/or Hgb Electrophoresis for hemoglobinopathies in African, Mediterranean, Middle Eastern, Asian, Southeast Asian, and Hispanic/South/Central American individuals. <input type="checkbox"/> Cystic Fibrosis mutation in Caucasian individuals if family history present. <input type="checkbox"/> Tay-Sachs in French Canadian individuals if family history present. <input type="checkbox"/> Hematopoietic stem cells screening (Ashkenazi Jewish Screening Panel) for those with Ashkenazi Jewish ancestry.	<input type="checkbox"/> Provide referral to specialist for those with family and genetic history risk factors. <input type="checkbox"/> Recommend folic acid 5mg daily prior to conception and for 12 weeks after conception if positive family history of neural tube defects or high risk ethnic group (ex. Sikh, Celtic, Northern Chinese).									
Nutrition: Eat well with Canada's Food Guide ²⁴ 🇨🇦 🇮🇹											
<input type="checkbox"/> Recommend folic acid 0.4-1.0mg daily (through a multivitamin or supplement) ¹⁵ 🇨🇦 🇮🇹 and folate rich diet, prior to conception and throughout pregnancy. <input type="checkbox"/> Recommend calcium 1000mg daily ²⁵ 🇨🇦 🇮🇹 through food and/or supplements. <input type="checkbox"/> Recommend essential fatty acid rich diet, including omega 3 and 6. <input type="checkbox"/> Recommend avoiding raw/undercooked meat and fish and unpasteurized milk and cheese ²⁶ 🇨🇦 🇮🇹 <input type="checkbox"/> Caffeine <300mg/day ²⁷ 🇨🇦 🇮🇹 <input type="checkbox"/> Recommend vitamin D 600 IU (15 µg) supplementation daily ²⁸ 🇨🇦 🇮🇹 <input type="checkbox"/> Recommend 2.6 µg of vitamin B12 daily through supplement or multivitamin.	<input type="checkbox"/> Screen for issues regarding access to food, nutrition, storage, cooking facilities and folic acid. <input type="checkbox"/> Screen for iron deficiency anemia if at risk.	<input type="checkbox"/> Provide referral to Dietitian or appropriate community agencies.									
Weight Status: Weight can increase risk of adverse pregnancy outcomes and developing chronic disease.											
Target Body Mass Index (BMI) = 18.5-24.9 (for ages ≥19) <table border="1"> <thead> <tr> <th>Waist Circumference (WC)²⁹ 🇨🇦 🇮🇹</th><th>Male Target</th><th>Female Target</th></tr> </thead> <tbody> <tr> <td>European, African, Eastern Mediterranean, Middle Eastern</td><td><102cm</td><td><88cm</td></tr> <tr> <td>South Asian, Asian, South and Central American</td><td><90cm</td><td><80cm</td></tr> </tbody> </table> Target BMI for ages <19 ³⁰ 🇨🇦 🇮🇹	Waist Circumference (WC) ²⁹ 🇨🇦 🇮🇹	Male Target	Female Target	European, African, Eastern Mediterranean, Middle Eastern	<102cm	<88cm	South Asian, Asian, South and Central American	<90cm	<80cm	<input type="checkbox"/> Screen BMI ³¹ 🇨🇦 🇮🇹 annually. BMI = weight(kg)/height(m) ² Weight: _____ Height: _____ BMI: _____ WC: _____	<input type="checkbox"/> Underweight (BMI <18.5) <input type="checkbox"/> Overweight (BMI = 25-29.9) <input type="checkbox"/> Obese (BMI >30) <input type="checkbox"/> Provide appropriate referrals for management. <input type="checkbox"/> Recommend folic acid 5mg daily prior to conception and for 12 weeks after conception for obese individuals. <input type="checkbox"/> Discuss recommended healthy weight gain ³² 🇨🇦 🇮🇹 during pregnancy and recommend contacting EatRight Ontario 1-877-510-5102.
Waist Circumference (WC) ²⁹ 🇨🇦 🇮🇹	Male Target	Female Target									
European, African, Eastern Mediterranean, Middle Eastern	<102cm	<88cm									
South Asian, Asian, South and Central American	<90cm	<80cm									
Physical Activity: Being physically active prepares the body for the physical demands of pregnancy, and can assist with stress management.											
<input type="checkbox"/> Recommend at least 150 minutes of moderate to vigorous aerobic physical activity per week, in episodes of 10 minutes or more. Add muscle and bone strengthening activities at least 2 days per week. See the Canadian Physical Activity Guidelines ³³ 🇨🇦 🇮🇹											
Psychosocial Stressors: Stress can have negative affects on pregnancy outcomes.											
<input type="checkbox"/> Identify stressors and discuss strategies to reduce impact.	Screen: <input type="checkbox"/> Access to Care <input type="checkbox"/> Housing <input type="checkbox"/> Social Isolation (newcomers, language barriers) ³⁴ 🇨🇦 🇮🇹 <input type="checkbox"/> Intimate Partner Violence ³⁵ 🇨🇦 🇮🇹 <input type="checkbox"/> Social Support <input type="checkbox"/> Unemployment <input type="checkbox"/> Workplace Stress <input type="checkbox"/> Finances <input type="checkbox"/> Unhealthy Relationship	<input type="checkbox"/> Inform women that violence often worsens during pregnancy and discuss safety plan. <input type="checkbox"/> Provide appropriate referrals ³⁶ 🇨🇦 🇮🇹									
Environmental Exposure: Discuss potential exposure to toxins in occupational and recreational activities ³⁷ .											
<input type="checkbox"/> Recommend avoiding fish high in mercury ³⁸ 🇨🇦 🇮🇹: Choose "light" verses "white" tuna and limit consumption to 4 x 2.5oz/week, and avoid barracuda, marlin, tilefish, tuna steak and any raw fish or shellfish. <input type="checkbox"/> Convey tips for reducing exposures in the home ³⁹ 🇨🇦 🇮🇹	Inquire about exposures to: <input type="checkbox"/> Solvents (ask about use) <input type="checkbox"/> Pesticides <input type="checkbox"/> Plastics <input type="checkbox"/> Teratogenic and/or Gonadotoxic Treatments (chemotherapy, radiation therapy) <input type="checkbox"/> Metals (lead, mercury) <input type="checkbox"/> Gases <input type="checkbox"/> Pollutants <input type="checkbox"/> Radiation	Health Canada's blood methylmercury guidance level in pregnancy or reproductive age: <8mcg/L (40nmol/L). <input type="checkbox"/> Refer to local health department if potential water/soil exposure. <input type="checkbox"/> Refer to Occupational Health Specialist as needed.									

Supporting Material*

- ¹ Toronto Public Health [Internet]. Toronto (ON): Toronto Public Health; c1998-2014 [cited 2014 Oct 15]. Your Reproductive Life Plan. Available from: <http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=779962ca69902410VgnVCM10000071d60f89RCRD>
- ² Society of Obstetricians and Gynaecologists of Canada [Internet]. Ottawa (ON): Society of Obstetricians and Gynaecologists of Canada; c2012 [cited 2014 Oct 15]. Choosing Wisely; Helping You Make Decisions About Contraception. Available from: <http://www.sexualityandu.ca/games-and-apps/choosing-wisely-birth-control-selection-tool>
- ³ Liu K, Case A; Society of Obstetricians and Gynaecologists of Canada. Advanced reproductive age and fertility. *Journal of Obstetrics and Gynaecology Canada* [Internet]. Nov 2011 [cited 2014 Nov 4];269:1165-1175. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/22082792>
- ⁴ BestStart.org [Internet]. Toronto (ON): Health Nexus; c2014 [cited 2014 Oct 15]. Available from: <http://www.healthbeforepregnancy.ca>
- ⁵ Public Health Agency of Canada [Internet]. Ottawa (ON): Public Health Agency of Canada [updated 2014 Sept 26; cited 2014 Oct 15]. Canadian Guidelines on Sexually Transmitted Infections. Available from: <http://www.phac-aspc.gc.ca/std-mts/sti-its/cgsti-ldcits/index-eng.php>
- ⁶ Motherisk [Internet]. Toronto (ON): The Hospital for Sick Children (SickKids); c1999-2013 [cited 2014 Oct 15]. Drugs in Pregnancy. Available from: <http://www.motherisk.org/women/drugs.jsp>
- ⁷ Before, Between, & Beyond Pregnancy [Internet]. Atlanta (GA): Preconception health and Health Care initiative [cited 2014 Oct 15]. Preconception Care Clinical Toolkit: Chronic Disease. Available from: <http://beforeandbeyond.org/toolkit/at-risk-unsure/chronic-disease/>
- ⁸ Maurer DM, Carl R. Screening for depression. *Am Fam Physician*. 2012 Jan 15;85(2):139-144. Available from: <http://www.aafp.org/afp/2012/0115/p139.html>
- ⁹ Moses S [Internet]. Minneapolis (MN): Family Practice Notebook; c2014 [updated 2013 Nov 12; cited 2014 Oct 15]. Generalized Anxiety Disorder Scale. Available from: <http://www.fnotebook.com/psych/Exam/GnrlzdAnxtyDsrdScsl.htm>
- ¹⁰ Centre for Addiction and Mental Health [Internet]. Toronto (ON): Centre for Addiction and Mental Health; c2012 [cited 2014 Oct 15]. Mental Health & Addiction Information A-Z. Available from: http://www.camh.ca/en/hospital/health_information/a_z_mental_health_and_addiction_information/Pages/default.aspx
- ¹¹ Smokers' Helpline [Internet]. Toronto (ON): Canadian Cancer Society; c2005-2014 [cited 2014 Oct 15]. Making a Referral. Available from: http://quit.smokershelpline.ca/refer/qc_MakingReferral.aspx
- ¹² Pregnets [Internet]. Toronto (ON): Centre for Addiction and Mental Health; c2014 [cited 2014 Oct 15]. Smoking During Pregnancy. Available from: <http://www.pregnets.org/mothers/DuringPregnancy.aspx>
- ¹³ CAN-ADAPTT [Internet]. Toronto (ON): Centre for Addiction and Mental Health: Nicotine Dependence Clinic; c2011 [cited 2014 Oct 15]. Pregnant and Breastfeeding Women. Available from: <https://www.nicotinedependenceclinic.com/English/CANADAPTT/Pages/Home.aspx>
- ¹⁴ Ordean A, Midmer D, Graves L, Payne S, Hunt G; PRIMA (Pregnancy-Related Issues in the Management of Addictions) Group [Internet]. Department of Family & Community Medicine, University of Toronto; c2004-2012 [updated 2012 Apr; cited 2014 Nov 4]. Available from: <http://ocfp.on.ca/docs/cme/prima-reference-list.pdf>
- ¹⁵ Society of Obstetricians and Gynaecologists of Canada [Internet]. Ottawa (ON): Society of Obstetricians and Gynaecologists of Canada [cited 2014 Oct 15]. Folic Acid: For Preconception and Pregnancy. Available from: <http://old.sogc.org/publications/folic-acid-for-preconception-and-pregnancy/>
- ¹⁶ Drug and Alcohol Helpline [Internet]. London (ON): ConnexOntario Health Services Information; c2014 [cited 2014 Oct 15]. Drug and Alcohol Resources in Canada. Available from: <http://www.drugandalcoholhelpline.ca/Home/Links>
- ¹⁷ Canadian Centre on Substance Abuse [Internet]. Ottawa (ON): Canadian Centre on Substance Abuse; c2014 [cited 2014 Oct 17]. Canada's Low-Risk Alcohol Drinking Guidelines. Available from: <http://www.ccsa.ca/Eng/topics/alcohol/drinking-guidelines/Pages/default.aspx>
- ¹⁸ Centre for Disease Control and Prevention [Internet]. Atlanta (GA): Centre for Disease Control and Prevention [updated 2014 Sept 2; cited 2014 Oct 15]. Immunization. Available from: <http://www.cdc.gov/preconception/careforwomen/immunization.html>
- ¹⁹ Before, Between, & Beyond Pregnancy [Internet]. Atlanta (GA): Preconception Health and Health Care initiative [cited 2014 Oct 15]. Preconception Care Clinical Toolkit: Infectious Disease and Immunizations. Available from: <http://beforeandbeyond.org/toolkit/desires-pregnancy/infectious-disease-and-immunizations/>
- ²⁰ Centre for Disease Control and Prevention [Internet]. Atlanta (GA): Centre for Disease Control and Prevention [updated 2014 Sept 3; cited 2014 Oct 15]. Infectious Disease. Available from: <http://www.cdc.gov/preconception/careforwomen/disease.html>
- ²¹ GECKO.ca [Internet]. Genetics Education Canada - Knowledge Organization; c2014 [cited 2014 Oct 15]. Available from: <http://geneticseducation.ca/>
- ²² Wilson DR. Genetic considerations for a women's pre-conception evaluation. *J Obstet Gynaecol Can*. 2011 Jan;33(1):57-64. Available from: [http://www.jogc.com/article/S1701-2163\(16\)34774-0/abstract](http://www.jogc.com/article/S1701-2163(16)34774-0/abstract)
- ²³ Genetics Education Canada [Internet]. Genetics Education Canada; c2014 [cited 2014 Oct 28]. Ethnicity-based screening in Canada. Available from: <http://geneticseducation.ca/wp-content/uploads/2014/06/Ethnicity-based-screening-POC-tool-FINAL-June-2014.pdf>
- ²⁴ Health Canada [Internet]. Ottawa (ON): Health Canada [updated 2011 Sept 1; cited 2014 Oct 15]. Eating Well with Canada's Food Guide. Available from: <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php>
- ²⁵ Dietitians of Canada [Internet]. Toronto (ON): Dietitians of Canada; c2013 [cited 2014 Oct 15]. Calcium. Available from: <http://www.dietitians.ca/Your-Health/Nutrition-A-Z/Calcium.aspx?categoryID=9>
- ²⁶ Government of Canada [Internet]. Ottawa (ON): Government of Canada; c2010 [updated 2010; cited 2014 Nov 4]. Food Safety for Pregnant Women. Available from: <http://healthycanadians.gc.ca/eating-nutrition/safety-salubrite/pregnant-enceintes-eng.php>
- ²⁷ Health Canada [Internet]. Ottawa (ON): Health Canada [updated 2012 Feb 16; cited 2014 Oct 15]. Caffeine in Food. Available from: <http://www.hc-sc.gc.ca/fn-an/securit/addit/caf/food-caf-aliments-eng.php>
- ²⁸ Health Canada [Internet]. Ottawa (ON): Health Canada [updated 2012 Mar 22; cited 2014 Nov 4]. Vitamin D and Calcium: Updated Dietary Reference Intakes. Available from: <http://www.hc-sc.gc.ca/fn-an/nutrition/vitamin/vita-d-eng.php>
- ²⁹ Heart and Stroke Foundation [Internet]. Toronto (ON): Heart and Stroke Foundation; c2014 [updated 2010 Jan; cited 2014 Oct 15]. Healthy Waists. Available from: <http://www.heartandstroke.ca/-/media/pdf-files/canada/2017-position-statements/obesity-ps-eng.ashx?la=en>
- ³⁰ Dietitians of Canada [Internet]. Toronto (ON): Dietitians of Canada; c2013 [cited 2014 Oct 15]. BMI Calculator for Children and Teens. Available from: <http://www.dietitians.ca/Your-Health/Assess-Yourself/Assess-Your-BMI/BMI-Children.aspx>
- ³¹ Dietitians of Canada [Internet]. Toronto (ON): Dietitians of Canada; c2013 [cited 2014 Oct 15]. Assess your BMI. Available from: <http://www.dietitians.ca/Your-Health/Assess-Yourself/Assess-Your-BMI/BMI-Adult.aspx>
- ³² Eat Right Ontario [Internet]. Toronto (ON): Dietitians of Canada; c2014 [cited 2014 Oct 15]. Planning to Be Pregnant? Healthy Tips for Healthy Weight Gain. Available from: <http://www.eatrightontario.ca/en/Articles/Pregnancy/Planning-to-Be-Pregnant-Healthy-Tips-for-Healthy.aspx#.VJB0Yb5N25Q>
- ³³ Canadian Society for Exercise Physiology [Internet]. Ottawa (ON): Canadian Society for Exercise Physiology; c2014 [cited 2014 Oct 15]. Canadian Physical Activity Guidelines and Canadian Sedentary Behaviour Guidelines. Available from: http://www.csep.ca/cmfiles/guidelines/csep_guidelines_handbook.pdf
- ³⁴ Best Start [Internet]. Toronto (ON): Health Nexus [updated 2014; cited 2014 Oct 15]. Information for Parents New to Canada. Available from: http://en.beststart.org/for_parents/are-you-looking-newcomers-parenting-resources

- ³⁵ Before, Between, & Beyond Pregnancy [Internet]. Atlanta (GA): Preconception health and Health Care initiative [cited 2014 Oct 15]. Preconception Care Clinical Toolkit: Intimate Partner Violence. Available from: <http://beforeandbeyond.org/toolkit/at-risk-unsure/interpersonal-violence/>
- ³⁶ Public Health Agency of Canada [Internet]. Ottawa (ON): Public Health Agency of Canada [updated 2010 Jan 28; cited 2014 Oct 15]. CPNP Projects Directory Online. Available from: <http://cpnp-pcnp.phac-aspc.gc.ca/index-eng.php>
- ³⁷ Dunlop AL, Brann AW, Raynor BD, Weathersby A, Norris D, Welsh K; Georgia Department of Community Health. Preconception Care Toolkit [Internet]. Atlanta (GA): Emory University School of Medicine, Department of Family and Community Medicine; c2014 [cited 2014 Jun 19]. Available from: <http://www.fpm.emory.edu/preventive/research/projects/index.html>
- ³⁸ Toronto Public Health [Internet]. Toronto (ON): Toronto Public Health; c1998-2014 [cited 2014 Oct 15]. Guide to Buying and Eating Fish. Available from: <http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=50e85ce6dfb31410VgnVCM10000071d60f89RCRD>
- ³⁹ Canadian Partnership for Children's Health & Environment [Internet]. Toronto (ON): Canadian Partnership for Children's Health & Environment; c2014 [cited 2014 Oct 15]. Creating Healthy Home Environments for Kids: Top 5 Tips. Available from: <http://www.healthyenvironmentforkids.ca/collections/creating-healthy-home-environments-kids-top-5-tips>

*These supporting materials are hosted by external organizations, and as such the accuracy and accessibility of their links are not guaranteed. CEP will make every effort to keep these links up to date.

References

- American College of Obstetricians and Gynecologists [Internet]. Washington (DC): American College of Obstetricians and Gynecologists c2014 [cited 2014 Jun 19]. Later Childbearing. Available from: <http://www.acog.org/-/media/For%20Patients/faq060.pdf?dmc=1&ts=20140617T1713330109>
- American College of Obstetricians and Gynecologists, Committee on Gynecologic Practice. Committee opinion no. 313: The importance of preconception care in the continuum of women's health care. *Obstet Gynecol* [Internet]. 2005 Sep [cited 2014 Jun 14]. 2005;106:665-6. Available from: <http://www.acog.org/-/media/For%20Patients/faq060.pdf?dmc=1&ts=20140617T1713330109>
- Atrash H, Jack BW, Johnson K. Preconception care: a 2008 update. *Curr Opin Obstet Gynecol*. 2008 Dec;20(6):581-9. doi: 10.1097/GCO.0b013e328317a27c.
- Before, Between, & Beyond Pregnancy [Internet]. Atlanta (GA): Clinical Work Group of the National Preconception Health and Health Care Initiative [cited 2014 Jun 17]. Available from: <http://beforeandbeyond.org/about-us/>
- Bellanca HK, Hunter SM. One key question: Preventive reproductive health is part of high quality primary care. *Contraception* [Internet]. 2013 Jul [cited 2014 Jun 19];88(1). Available from: <https://www.arhp.org/publications-and-resources/contraception-journal/july-2013>
- Bello JK, Adkins K, Stulberg DB, Rao G. Perceptions of a reproductive health self-assessment tool. *Patient Educ Couns*. 2013 Dec;93(3):655-63. doi: 10.1016/j.pec.2013.09.004.
- Berry, E; Reproductive Health Guidance Document Working Group. Reproductive health guidance document [Internet]. Perazzo DF, editor. Ontario Ministry of Health Promotion; 2010 May [cited 2014 Jun 19]. Available from: <http://www.mhp.gov.on.ca/en/healthy-communities/public-health/guidance-docs/ReproductiveHealth.pdf>
- Best Start [Internet]. Toronto (ON): Health Nexus; c2014 [cited 2014 Jun 20]. Health Before Pregnancy Workbook. Available from: <http://www.healthbeforepregnancy.ca/future.htm>
- Best Start [Internet]. Toronto (ON): Health Nexus; c2014 [cited 2014 Jun 1]. Preconception Health: Public Health Initiatives in Ontario. Available from: <http://www.beststart.org/resources/preconception/index.html>
- Best Start [Internet]. Toronto (ON): Health Nexus; c2014 [cited 2014 Jun 19]. Preconception Health: Physician Practices in Ontario. Available from: http://www.beststart.org/resources/preconception/pdf/precon_health_survey3.pdf
- Best Start [Internet]. Toronto (ON): Health Nexus; c2014 [cited 2014 Dec 12]. Obesity in Preconception and Pregnancy. Available from: http://www.beststart.org/resources/preconception/BSRC_obesity_report_April2014.pdf
- Best Start [Internet]. Toronto (ON): Health Nexus; c2014 [cited 2014 Jun 19]. Resources and Research. Available from: <http://www.beststart.org/resources/preconception/index.html>
- Best Start [Internet]. Toronto (ON): Health Nexus; c2014 [cited 2014 Jun 27]. Preconception Health: Awareness and Behaviours in Ontario. Available from: http://www.beststart.org/resources/preconception/precon_health_survey1.pdf
- Bialystok L, Poole N, Greaves L. Preconception Care: Call for national guidelines. *Can Fam Physician*. 2013 Jul;59(10):1037-1039.
- Bombard JM, Robbins CL, Dietz PM, Valderrama AL. Preconception care: the perfect opportunity for health care providers to advise lifestyle changes for hypertensive women. *Am J Health Promot*. 2013 Jan-Feb;27(3):S43-9. doi: 10.4278/ajhp.120109-QUAN-6.
- Braspenningx S, Haagdoorens M, Blaumeiser B, Jacquemyn Y, Mortier G. Preconceptional care: a systematic review of the current situation and recommendations for the future. *Facts Views Vis Obgyn*. 2013;5(1): 13-25.
- Canadian Institute for Health Information [Internet]. Ottawa (ON): Canadian Institute for Health Information; c1996-2014 [updated 2011 Sept; cited 2014 Jun 17]. In due time: Why maternal age matters. Available from: https://secure.cihi.ca/free_products/AIB_InDueTime_WhyMaternalAgeMatters_E.pdf
- Centre for Disease Control and Prevention [Internet]. Atlanta (GA): Centre for Disease Control and Prevention [cited 2014 Jun 17]. Preconception Health and Health Care Steps to a Healthier Me. Available from: http://www.cdc.gov/preconception/showyourlove/documents/Healthier_Me_NonPlan.pdf
- Centre for Disease Control and Prevention [Internet]. Atlanta (GA): Centre for Disease Control and Prevention [cited 2014 Jun 17]. Steps to a Healthier Me and Baby-to-Be. Available from: http://www.cdc.gov/preconception/showyourlove/documents/Healthier_Baby_Me_Plan.pdf
- Centre for Disease Control and Prevention [Internet]. Atlanta (GA): Centre for Disease Control and Prevention [updated 2010; cited 2014 Jun 17]. Preconception Health and Health Care: My Reproductive Life Plan. Available from: <http://www.cdc.gov/preconception/documents/reproductivelifeplan-worksheet.pdf>
- Centre for Disease Control and Prevention [Internet]. Atlanta (GA): Centre for Disease Control and Prevention [updated 2013; cited 2014 Jun 17]. Preconception Health and Health Care. Available from: <http://www.cdc.gov/preconception/index.html>
- Centre for Disease Control and Prevention [Internet]. Atlanta (GA): Centre for Disease Control and Prevention Preconception Health and Health Care [updated 2010; cited 2014 Jun 17]. Reproductive Life Plan Tool For Health Professionals. Available from: <http://www.cdc.gov/preconception/documents/rplhealthproviders.pdf>
- Chandranipapongse W, Koren G. Preconception counseling for preventable risks. *Can Fam Physician*. 2013 Jul;59(7):737-9.
- Comley L, Mousmanis P. Improving the odds: Healthy child development. 6th ed. [Internet]. Ontario College of Family Physicians; 2010 [cited 2014 Jun 27]. Available from: <http://ocfp.on.ca/docs/research-projects/improving-the-odds-healthy-child-development-manual-2010-6th-edition.pdf>
- Denktas S, Jong-Potjer LC, Waelput AJM, Temel S, Voorst van SF, Vos AA, et al. Preconception care: A Review of the Literature [Internet]. Rotterdam (NL): University Medical Centre Rotterdam, Erasmus MC, Department of Obstetrics and Gynecology, Division of Obstetrics and Prenatal Medicine; 2012 [cited 2014 Jun 19]. Available from: <http://www.verascholmerich.com/wp-content/uploads/2012/11/Preconception-care-review-170112.pdf>
- Dunlop AL, Brann AW, Raynor BD, Weathersby A, Norris D, Welsh K; Georgia Department of Community Health. Preconception Care Toolkit [Internet]. Atlanta (GA): Emory University School of Medicine, Department of Family and Community Medicine; c2014 [cited 2014 Jun 19]. Available from: <http://www.fpm.emory.edu/preventive/research/projects/index.html>
- Dunlop AL, Jack B, Frey K. National recommendations for preconception care: the essential role of the family physician. *J Am Board Fam Med*. 2007 Jan-Feb;20(1):81-4.
- Every Woman California [Internet]. California: Preconception Health Council of California [cited 2014 Jun 24]. Guidelines for Preconception and Interconception Care. Available from: http://www.everywomancalifornia.org/content_display.cfm?categoriesID=120&contentID=360
- Farahi N, Zolotar A. Recommendations for preconception counseling and care. *Am Fam Physician*. 2013 Oct 15;88(8):499-506.
- Frey KA, Navarro SM, Kotelchuck M, Lu MC. The clinical content of preconception care: preconception care for men. *American Journal of Obstetrics & Gynecology*. 2008;199(6):S389-395.
- Gavin L, Moskosky S, Carter M, Curtis K, Glass E, Godfrey E, Marcell A, Mautone-Smith N, Pazol K, Tepper N, Zapata L; Centers for Disease Control and Prevention (CDC). Providing quality family planning services: Recommendations of CDC and the U.S. Office of Population Affairs. *MMWR Recomm Rep*. 2014 Apr 25;63(RR-04):1-54.

- Government of Nunavut Department of Health and Social Services. Nunavut maternal and newborn health care strategy (2009-2014). Iqaluit (NU): Government of Nunavut Department; 2009 [cited 2014 Jun 30]. Available from: http://www.gov.nu.ca/sites/default/files/files/Maternal%20strategy_ENG.pdf
- Health Canada [Internet]. Ottawa (ON): Health Canada [updated 2012 Feb 16; cited 2014 Jun 4]. Caffeine in Food. Available from: <http://www.hc-sc.gc.ca/fn-an/securit/addit/caf/food-caf-aliments-eng.php>
- Jack BW, Atrash H, Conrod DV, Moos M, O'Donnell J, Johnson K. The clinical content of preconception care: An overview and preparation of this supplement. *American Journal of Obstetrics & Gynecology*. 2008;199(6):S266-S279.
- Johnson K, Posner SF, Biermann J, Cordero JF, Atrash HK, Parker CS, et al. Recommendations to improve preconception health and health care. Atlanta (US): CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care; 2006 Apr. Available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5506a1.htm>
- LGBTQ Parenting Network [Internet]. Toronto (ON): Sherbourne Health Centre [updated 2014 Aug 25; cited 2014 Oct 15]. LGBTQ Family Planning Courses. Available from: <http://lgbtqpn.ca/>
- Legrand M, Freeley M, Tikhonov C, Schoen D, Li-Muller A. Methylmercury blood guidance values for Canada. *Canadian Journal of Public Health* [Internet]. 2010 [cited 2014 Jun 17];101(1). Available from: <http://journal.cpha.ca/index.php/cjph/article/view/2181>
- Mazza D, Chapman A, Michie S. Barriers to the implementation of preconception care guidelines as perceived by general practitioners: a qualitative study. *BMC Health Serv Res*. 2013 Jan 31;13(36).
- Medline Plus [Internet]. U.S. National Library of Medicine [updated 2014 Sept 24; cited 2014 Jun 17]. Preconception Health. Available from: <http://www.nlm.nih.gov/medlineplus/preconceptioncare.html#cat6>
- Mittal P, Dandekar A, Hessler D. Use of a modified reproductive life plan to improve awareness of preconception health in women with chronic disease. *Perm J*. 2014 Spring;18(2):28-32.
- Mom and Baby [Internet]. Chapel Hill (NC): UNC Center for Maternal and Infant Health, University of North Carolina; c2011 [cited 2014 Jun 19]. Preconception Health. Available from: <http://mombaby.org/index.php?c=4&s=10090>
- Moos M, Badura M, Posner SF, Lu MC; March of Dimes Steering Committee. Quality improvement opportunities in preconception and interconception care [Internet]. In: Berns S, editor. Toward improving the outcome of pregnancy III: Enhancing perinatal health through quality, safety and performance initiatives. March of Dimes; 2010 Dec [cited 2014 Jun 19]. Available from: <http://www.marchofdimes.com/materials/toward-improving-the-outcome-of-pregnancy-iii.pdf>
- Mom and Baby [Internet]. Chapel Hill (NC): UNC Center for Maternal and Infant Health, University of North Carolina; c2011 [cited 2014 Jun 19]. Preconception Health. Available from: <http://mombaby.org/index.php?c=4&s=10090>
- Ontario Ministry of Health and Long-Term Care [Internet]. Toronto (ON): Ontario Ministry of Health and Long-Term Care; c2009-2010 [updated 2014 Oct 8; cited 2014 Oct 15]. Health Services in Your Community: Public Health Units. Available from: <http://www.health.gov.on.ca/en/common/system/services/phu/locations.aspx>
- Public Health Agency of Canada. Ottawa (ON): Public Health Agency of Canada [updated 2013 May 13; cited 2014 Jun 14]. Canadian best practices portal: Maternal and infant health. Available from: <http://cbpp-pcpe.phac-aspc.gc.ca/category/determinants-of-health/maternal-and-infant-health/#Prenatal%20Health>
- Registered Nurses' Association of Ontario [Internet]. Toronto (ON): Registered Nurses' Association of Ontario; 2014 [cited 2014 Jun 1]. Primary prevention of childhood obesity. 2nd ed. Available from: <http://rnao.ca/bpg/guidelines/primary-prevention-childhood-obesity>
- Sackey JA. The preconception office visit [Internet]. In: Wilkins-Haug L, editor. UpToDate. Waltham (MA): UpToDate; 2014 [updated 2014 Mar 14; cited 2014 Jun 4]. Available from: <http://www.uptodate.com/contents/the-preconception-office-visit#H1>
- Saskatchewan Prevention Institute [Internet]. Saskatoon (SK): Saskatchewan Prevention Institute; c2010 [cited 2014 Jun 19]. The What, Why, and How of Preconception Care. Available from: http://www.skprevention.ca/wp-content/uploads/2013/07/2-310_Preconception_Care_PowerPoint_Presentation.pdf
- Swick A, Enders J. Preconception health in Ontario: Perspectives from practice, current evidence and opportunity for networking. Proceedings of the Best Start Conference; 2013 Feb 8; Markham, CA. The Society of Obstetricians and Gynecologists of Canada [Internet]. Ottawa (ON): The Society of Obstetricians and Gynecologists of Canada; c2014 [cited 2014 Jun 17]. Age and Fertility. Available from: <http://sogc.org/publications/age-and-fertility/>
- Toronto Public Health [Internet]. Toronto (ON): Toronto Public Health; c1998-2014 [cited 2014 Jun 24]. Your Reproductive Life Plan. Available from: <http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=779962ca69902410VgnVCM10000071d60f89RCRD&vgnextfmt=default>
- Tough S, Tofflemire K, Jack M. Reproduction in Alberta: A Look at the Preconception, Prenatal, and Postnatal Periods [Internet]. Edmonton (AB): Alberta Centre for Child, Family and Community Research; 2006 [cited 2014 Jun 30]. Available from: <http://www.aphp.ca/pdf/Reproduction%20in%20Alberta-2006%2006%2020.pdf>
- Working Group for FAS. Guideline for the prevention of Fetal Alcohol Syndrome (FAS) [Internet]. Alberta: Toward Optimized Practice (TOP) Program; 2007 [cited 2014 Jul 7]. Available from: http://www.topalbertadoctors.org/download/403/FASD_prevention_guideline.pdf
- World Health Organization. Preconception care to reduce maternal and childhood mortality and morbidity. Geneva (CH): World Health Organization; 2012 Feb [cited 2014 Jun 19]. Available from: http://apps.who.int/iris/bitstream/10665/78067/1/9789241505000_eng.pdf

This Tool was developed as part of the Knowledge Translation in Primary Care Initiative which is led by CEP with collaboration from OCFP. Clinical leadership for the development of this tool was provided by Rebekah Barrett MN, NP-PHC and Dr. Deanna Telner MD, MEd, CFPC, FCFP and was subject to external review by primary care providers and other relevant stakeholders. This Tool was funded by the Government of Ontario as part of the Knowledge Translation in Primary Care Initiative.

This Tool was developed for licensed health care professionals in Ontario as a guide only and does not constitute medical or other professional advice. Primary care providers and other health care professionals are required to exercise their own clinical judgment in using this Tool. Neither the Centre for Effective Practice ("CEP"), Ontario College of Family Physicians, Government of Ontario, and the contributors to this Tool, nor any of their respective agents, appointees, directors, officers, employees, contractors, members or volunteers: (i) are providing medical, diagnostic or treatment services through this Tool; (ii) to the extent permitted by applicable law, accept any responsibility for the use or misuse of this Tool by any individual including, but not limited to, primary care providers or entity, including for any loss, damage or injury (including death) arising from or in connection with the use of this Tool, in whole or in part; or (iii) give or make any representation, warranty or endorsement of any external sources referenced in this Tool (whether specifically named or not) that are owned or operated by third parties, including any information or advice contained therein.



The Preconception Health Care Tool is a product of the Centre for Effective Practice. Permission to use, copy, and distribute this material for all non-commercial and research purposes is granted, provided the above disclaimer, this paragraph and the following paragraphs, and appropriate citations appear in all copies, modifications, and distributions. Use of the Preconception Health Care Tool for commercial purposes or any modifications of the tool are subject to charge and use must be negotiated with the Centre for Effective Practice (Email: info@effectivepractice.org).

For statistical and bibliographic purposes, please notify the Centre for Effective Practice (info@effectivepractice.org) of any use or reprinting of the tool. Please use the below citation when referencing the tool:

Reprinted with Permission from Centre for Effective Practice (November 2015). Preconception Health Care Tool. Toronto: Centre for Effective Practice.

Developed by:



In collaboration with:



Ontario College of Family Physicians