Explanations for the Preventive Care Checklist Form® (Page 1/6)

Education/Counselling

Lifestyle/Habits

Family planning:

Inform patients of reproductive age that:

- Women who delay child bearing are at increased risk of infertility
- There are obstetrical and perinatal risks with advanced maternal age
- Artificial reproductive therapy (ART) cannot guarantee a live birth or compensate for age related decline in fertility

Women aged 20-30 year range should be counseled about age related infertility when other reproductive health issues are addressed. They should be aware that natural and artificial reproductive success is significantly lower in their late 30's and 40's (with the exception of egg donation). Counsel on effective methods of contraception. Long-acting reversible methods are the most effective.

Behavioural

Folic acid (A):

To prevent neural tube defects (NTD) in all women capable of becoming pregnant

- Low risk-women: Folic acid supplementation of 0.4 to 0.8 mg daily taken at least one month before and three months after conception. The Society of Obstetricians and Gynaecologists of Canada (SOCG) recommends 0.4 mg once daily should be taken 2-3 months before and 4-6 weeks after conception or as long as the woman is breastfeeding.
- Moderate-risk women: SOCG recommends supplementation with 1 mg of folic acid daily beginning at least 3 months before conception until 12 weeks gestational age, followed by 0.4 to 1 mg of folic acid throughout the pregnancy from 12 weeks gestational age until 4-6 weeks postpartum or as long as the woman is breastfeeding.
- High-risk women (personal or family history of NTD): Supplementation with 4 mg folic acid daily during 3 months before and 3 months after conception reduces recurrence. SOCG recommends that if either partner has had previous pregnancy with NTD, supplement with 4 mg folic acid daily during 3 months before conception until 12 weeks gestational age. High risk women should supplement with 0.4 to 1 mg of folic acid throughout the pregnancy from 12 weeks gestational age until 4-6 weeks postpartum or as long as the woman is breastfeeding.

Adverse nutritional habits (B):

- · Prevention of coronary artery disease, colon cancer
- Provide general dietary advice: decrease fat, increase fiber
- Those at increased risk, consider referral to a clinical nutritionist or other professional with specialized nutritional expertise

Dietary advice on fat/cholesterol (B):

- Prevent coronary heart disease
- Decrease intake of total fat, saturated fat, and cholesterol Calcium 1000-1200 mg/day:
 - Prevent osteoporosis

(See reverse for references, insert for explanations)

- Osteoporosis Canada in conjunction with Health Canada recommend that adults age <50 years should have 1000 mg of calcium per day. Osteoporosis Canada recommends that adults age >50 should have 1200 mg daily.
- If this amount cannot be provided by diet alone (usually three or more servings of dairy products), then calcium supplementation should be recommended.
- SOGC recommend postmenopausal women have 1500 mg of elemental calcium per day.

Vitamin D:

Prevent osteoporosis and hip fractures.

- Osteoporosis Canada recommends 400-1000 IU (10-25 mcg) daily if low risk of vitamin D deficiency and 800-1000 IU (20-50 mcg), which may safely be increased to 2000 U, if ≥ 50 years and at moderate risk of vitamin D deficiency.
- SOGC recommends 800 IU/day in postmenopausal women. From CTFPHC (B): Calcium and vitamin D supplementation alone prevents osteoprotic fractures in postmenopausal women without documented osteoprosis.

Moderate physical activity (B):

- Prevention of cardiovascular disease and hypertension.
- Physical activity can also contribute to the prevention of obesity, Type II diabetes mellitus and osteoporosis.
- Recommend moderate-level physical activity performed consistently to accumulate 30 minutes or more over the course of most days of the week.
- Moderate intensity physical activities include: normal walking, golfing on foot, slow biking, raking leaves, cleaning windows, slow dancing, light restaurant work.
- Note: Doing moderate physical activity is a B recommendation but physician counselling is a C.

Avoid sun exposure, use protective clothing (B):

- Prevent skin cancer
- Evidence from epidemiologic studies focusing on etiology of melanoma, prudence and low cost/side-effects, supports the avoidance of excessive sun exposure at mid-day, plus the use of protective clothing.
- Sunscreen use is a C recommendation for general population. Safe sex practices/Sexually Transmitted Infections counselling (esp. Gonorrhea counselling) (B):
 - Prevent transmission of sexually transmitted infections.
- Abstinence is most effective, fair evidence to use condoms. Obesity (BMI \geq 30).
 - The Obesity Network recommends screening for depression, eating disorders and psychiatric disorders in obese patients.
 - Behaviour modification techniques, cognitive behavioural therapy, activity enhancement and dietary counselling are effective in the management of obesity.
 - Reduce calorie intake by 500-1000 kcal/day.
 - Initiate 30 min of moderate intensity exercise 3-5x/wk, increase to ≥60 min on most days with endurance training.
 - Target weight loss of 5%-10% of body weight or 0.5-1 kg/wk for 6 months.

From CTFPHC: For adults who are overweight or obese (BMI 25-39) offer structural behavioural interventions aimed at weight loss. These interventions should focus on diet, exercise and/or lifestyle changes (including counselling, education/support and/or environmental changes.

Smoking Counselling To Prevent Tobacco-Caused Disease

- Smoking cessation (A): counselling effective to reduce the proportion of smokers.
- Nicotine replacement therapy (A): may be offered as an adjunct to smoking cessation; it increases cessation rates.
- Buproprion may be added as an adjunct to smoking cessation; it increases cessation rates. No recommendation yet for newer medications.
- Fruit and Green leafy vegetables for smokers: eat an average of seven portions of green leafy vegetables or fruit per week to lower risk of lung cancer.
- Referral to validated smoking cessation program: Referral by physician improves participation in group programs.

PH1806GB1597

= Grade A, or strong evidence (from the Canadian Task Force on Preventive Health Care) Grade B. or weak evidence (from the Canadian Task Force on Preventive Health Care Plain text = Guidelines (from other Canadian sources)



Explanations for the Preventive Care Checklist Form® (Page 2/6)

Education/Counselling cont'd

Alcohol Counselling

- Prevent Alcohol related Morbidities
- Case finding for problem drinking (B): Standardized questionnaires (e.g. CAGE, AUDIT) and/or patient inquiry.
- Counselling for problem drinking (B): Clarify association between alcohol consumption and alcohol-related consequences; advice to reduce consumption.

Elderly

- Cognitive Assessment (B): Do not screen asymptomatic adults (≥65 yrs) for cognitive impairment.
- When caregivers or informants describe cognitive decline in an individual, these observations should be taken very seriously; cognitive assessment and careful follow-up are indicated (A).
- Memory complaints by patient or caregiver should be evaluated and the individual followed to assess progression (B).
- Fall assessment:
- Good evidence to perform multidisciplinary post-fall assessment on elderly patients who have a <u>history of falls</u> or to refer elderly patients to multidisciplinary post-fall assessment teams, where such a service is available (A).
- There is insufficient evidence to support including assessment and counselling of elderly patients for the risk of falling in the routine health exam of the elderly.

Oral Hygiene To prevent periodontal disease, and oral cancer

• Brushing/flossing teeth (A, B): Flossing teeth is effective to preventing gingivitis in adults. Brushing teeth is essential in the application of fluoride dentifrice to prevent dental caries (A) and prevention of gingivitis (B).

- Fluoride (toothpaste/supplement) (A): Daily use of fluoride toothpaste gives significant reductions in decay and/or daily fluoride supplements (only where water fluoride levels are less than optimal).
- Tooth scaling and prophylaxis (B): In periodontally healthy
 patients, intensive professional oral hygiene and prophylaxis
 prevents chronic gingivitis and periodontitis. Annual scaling
 provides no additional benefit for those who maintain good
 oral hygiene.
- Smoking cessation (A, B): To reduce the risk of oral cancer.
 Intervention programs have reduced the incidence of precancerous lesions. Also prevents periodontal disease due to smoking (B).

Personal Safety

- Seat belts (B): Prevent injury from Motor Vehicle Collisions.
 Physicians can influence significant short-term improvement in seat belt use.
- Noise control programs/hearing protection (A): Good evidence to support noise control programs and hearing protection but no comment made on impact of physician counselling.

Parents with children <15 years of age

- Poison control prevention (B): Counselling on prevention of poisoning and poison control centre phone number stickers to the parents of young children.
- Smoke detectors, non-flammable sleepwear and hot water thermostat settings (B): Counselling can increase the number of safety features in the home but impact on injury is unknown.

Physical Examination

Blood Pressure

From CTFPHC: For those without a previous diagnosis of hypertension, measure blood pressure (BP) to screen for hypertension. Measure BP at all appropriate visits. BP should be measured according to the current techniques described in the Canadian Hypertension Education Program (CHEP) recommendations.

From CHEP: Target BP of <140/90 in most patients, <130/80 in diabetics. Consider target sBP <120 in high risk patients.

	Visit	Diagnosis of hypertension if:	Alternative diagnosis:
	1	Urgency/emergency: • Asymptomatic DBP ≥130 • Hypertensive encephalopathy • Acute aortic dissection • Acute left ventricular failure • Acute coronary syndrome, Acute kidney injury, Intracranial hemorrhage, Acute ischemic stoke, Eclampsia of pregnancy	Ambulatory BP Monitoring: mean awake ≥135/85 or mean 24hr SBP ≥130/80 Home BP: avg. ≥135/85
	2	Target end-organ damage, DM, CKD or BP ≥180/110	
	3	≥160/100	
	4-5	≥140/90	

Should be measured at all appropriate primary care visits.

Waist to Hip Ratio (WHR): WHR >1.0 for men and >0.85 for women is considered a marker for abdominal obesity.

Waist circumference (WC):

- A WC above 102 cm (40 in) for men and 88 cm (35 in) for women is associated with increased risk of type 2 diabetes, coronary heart disease and hypertension.
- The WC should be used in those with a BMI between 18.5 and 34.9 to identify additional risk.

Screening for hearing impairment in elderly (B):

- All of the following have high sensitivity to detect hearing loss
- Whispered voice test: Whispered-voice, out of field of vision
- Audioscope
- Inquiry: Ask the patient about any hearing difficulty Snellen test (B):
- In elderly, reliably detects reduced visual acuity. **Pap**(B):

Among women who have no symptoms of cervical cancer and who have ever been sexually active, screen for cervical cancer with Pap tests. Recommendations do not apply to women with symptoms of cervical cancer, previous abnormal results on screening (unless cleared to return to normal screening), those without a cervix, immunosuppressed, or limited life expectancy.

For women aged 25-29 years, screen every 3 years

For women aged 30-69 years, screen every 3 years
For women aged 70 years and older who have undergone
adequate screening (3 successive negative Pap test results in the

adequate screening (3 successive negative Pap test results in the last 10 years), stop screening. Continue to screen until 3 negative tests are obtained

Please note:

iold = Grade A, or strong evidence (from the Canadian Task Force on Preventive Health Care)

alics = Grade B, or weak evidence (from the Canadian Task Force on Preventive Health Care)

Plain text = Guidelines (from other Canadian sources)

(See reverse for references, insert for explanations) PH1806GB1597



Explanations for the Preventive Care Checklist Form® (Page 3/6)

Investigations/Labs

Screening for Breast Cancer:

Screen for breast cancer with mammography. Average risk individuals include those without a personal history of breast cancer, no history of breast cancer in a first degree relative, no BRCA 1/2 mutation, and no history of chest wall radiation For women aged 50-74 years, screen every 2-3 years.

Screening for Colorectal Cancer (B):

For those at average risk (no personal or familial risk factors).

- Ages 50-59 (weak recommendation)
- Ages 60-74 (strong recommendation)
- Either 1. FOBT (fecal immunochemical testing (FIT) or high sensitivity g-FOBT) every 2 years OR
- 2. Flexible sigmoidoscopy

Screening for sexually transmitted infections in high risk populations:

- Sexually active youth <25 years old
- Sexual contacts of individuals known to/suspected to have an STI
- Sex workers and their sexual partners
- Individuals with new sexual partners or >2 sexual partners in the past year
- Serially monogamous individuals who have had a series of one partner relationships over time
- Individuals not using contraception or using only non-barrier methods of contraception, those using injection drugs
- Substance use especially in association with sex, individuals engaging in unsafe sexual practices
- Individuals who require "survival sex"
- Homeless populations or those with street involvement
- Individuals engaging in anonymous sexual partnering
- Victims of sexual assault/abuse
- Those who have had previous STIs
- Syphilis (A): Serology testing
- Gonorrhea (A): If asymptomatic, use nucleic acid amplification testing (NAAT) for cervical or urine testing in women and for urine testing in men
- If symptomatic, both culture and NAAT testing should be done
- Culture is the only method for oropharyngeal and rectal testing
- Chlamydia (B): Screen with culture or polymerase chain reaction. Urine testing available.
- Hepatitis B virus (HBV): Screen with hepatitis B surface antigen (HBsAg) in blood.
- Hepatitis C (B): Screen with hepatitis C antibody and hepatitis C RNA if at risk.

Screening for HIV infection in the following:

- Individuals requesting an HIV test
- Individuals with symptoms and signs of HIV infection
- Individuals with illnesses associated with a weakened immune system or a diagnosis of tuberculosis
- Unprotected anal or vaginal intercourse or use of shared drug equipment with a partner whose HIV status is known to be positive
- Pregnant or planning a pregnancy; and their partners as appropriate
- · Victims of sexual assault

Screening for Lung Cancer (B):

Low dose CT scan q1year (age 55-74) if risk factors (30 packyear, currently smoke or quit less than 15 years ago) up to 3 consecutive times.

Screening Abdominal Aortic Aneurysm (B): Abdominal ultrasound once for males age 65-80. Do not screen men older than age 80 and do not screen women for abdominal aortic aneurysm.

Bone Mineral Density: Screen for osteoporosis

From CTFPHC (B):

To prevent fragility fractures: Screen postmenopausal women by DEXA if over 65 years of age or have a history of previous fracture, or have a have an Osteoporosis Risk Assessment Instrument score ≥9 or have a SCORE score ≥6. From Osteoporosis Society of Canada: Indications for measuring bone mineral density

Older Adults (age ≥50 yr)

Age ≥65 yr (both women and men) Clinical risk factors for fracture (menopausal women, men age 50-64 yr):

Fragility fracture after age 40 yr Prolonged use of glucocorticoids* Use of other high-risk medications† Parental hip fracture

Vertebral fracture or osteopenia identified on radiography
Current smoking
High alcohol intake

Low body weight (<60 kg) or major weight loss (>10% of body weight at age 25 yr) Rheumatoid arthritis Other disorders strongly associated with osteoporosis

Younger adults (age <50 yr)

Fragility fracture
Prolonged use of
glucocorticoids*
Use of other high-risk
medications†
Hypogonadism or premature
menopause (age<45 yr)
Malabsorption syndrome
Primary hyperparathyroidism
Other disorders strongly
associated with rapid bone
loss and/or fracture

*At least three months cumulative therapy in the previous year at a prednisone-equivalent dose ≥7.5 mg daily.

†For example, aromatase inhibitors or androgen deprivation therapy.

Screening for Diabetes:

CDA: All patients should be evaluated annually for type 2 diabetes

Screen for type 2 diabetes (T2DM) with a fasting plasma glucose (FPG) and/or A1C every 3 years after 40 years of age (or earlier if at high risk using a risk calculator)

A 75 g oral glucose tolerance test (OGTT) may be indicated if the FPG is 6.1-6.9 or the A1C is 6-6.4 in order to identify those with impaired glucose tolerance (IGT) or DM

A 75 g OGTT may be indicated if the FPG is 5.6-6 or the A1C is 5.5-5.9 if more than 1 risk factor is present, in order to identify those with IGT or DM

More frequent and/or earlier screening with A1C and/or FPG or 2 hour plasma glucose in a 75 g OGTT should be considered in those who are at very high risk using a risk calculator or have additional risk factors for DM including: First degree relative with T2DM, gestational DM, Aboriginal/African/Asian/Hispanic/South Asian, medications (atypical antipsychotics, HAART, glucocorticoids etc.), associated conditions (PCOS, acanthosis nigricans, obstructive sleep apnea, psychiatric disorders, HIV),

PH1806GB1597



Explanations for the Preventive Care Checklist Form® (Page 4/6)

Investigations/Labs cont'd

delivered a macrosomic infant, impaired fasting glucose (IFG)/IGT/ A1C 6-6.4, end-organ damage (micro or macrovascular complications), vascular risk factors (HDL <1 in men or <1.3 in women, TG >1.7, hypertension, overweight, abdominal obesity), other secondary causes

A1C ≥6.5%, FPG ≥7 mmol/L or 2 hour plasma glucose in a 75 g OGTT ≥11.1 mmol/L is diagnostic for diabetes*

From CTFPHC: For adults at high risk of DM (determined with a validated risk calculator), screen every 3-5 years with A1C For adults at very high risk of DM (determined with a validated risk calculator), screen annually with A1C

Recommend risk calculation every 3-5 years

A1C is the preferred test, but FPG or OGTT are acceptable alternatives

Validated risk calculators include the FINDRISC (the Finnish Diabetes Risk Score) or CANRISK (the Canadian Diabetes Risk Assessment Questionnaire):

Link to FINRISK:

Canadiantaskforce.ca/perch/resources/d-patient-findrisc.pdf Link to CANRISK:

Canadiantaskforce.ca/perch/resources/canrisk-eng.pdf

Screen for Dyslipidemia:

Lipid profile (LDL, HDL, TG, non-HDL) for men age ≥40 years and women aged >40 years or postmenopausal. Optional screening with Apo-B or urine ACR (if eGFR <60, hypertension, DM). Consider earlier screening in ethnic groups at increased risk (South Asians or First Nations). Screen all individuals with the following conditions regardless of age: smoker, diabetes, hypertension, family history of premature cardiovascular disease or hyperlipidemia, erectile dysfunction, chronic kidney disease, inflammatory disease (rheumatoid arthritis, systemic lupus erythematosus, psoriatic arthritis, ankylosing spondylitis, inflammatory bowel disease) HIV, COPD, clinical evidence of atherosclerosis or abdominal aneurysm, clinical manifestations of hyperlipidemia or BMI>27

Screening and Framingham risk assessment should be completed every 5 years (if 10 year risk <5%) or yearly (if 10 year risk ≥5%) for men age 40-75 years and for women age 50-75 years. Double the percent risk when there is a positive family history of premature cardiovascular disease (first degree relative <55 years if male and <65 years if female)

Complete a risk assessment whenever a patient's expected risk status changes

Younger individuals with at least 1 risk factor for premature cardiovascular disease might also benefit from a risk assessment to motivate them to improve their lifestyle

Calculate and discuss a patient's "Cardiovascular Age" to improve likelihood that patients will reach targets:

http://cvage.ca/index.en.html

Level of Risk	Consider Treatment if:	Treatment Targets
High (10 year risk ≥20% or clinical atherosclerosis, AAA, diabetes >15 years duration and age >30 years, diabetes with age >40 years or presence of microvascular disease, high risk kidney disease*, high risk hypertension**)	Consider treatment in all patients	LDL-C ≤2 mmol/L or ≥50% reduction in LDL-C Alternative targets: ApoB ≤0.8 g/L Non-HDL-C ≤2.6 mmol/L
Intermediate (10 year risk 10 to <20%)	LDL-C ≥3.5 mmol/L or ApoB ≥1.2 g/L or non-HDL-C ≥4.3 mmol/L	LDL-C ≤2 mmol/L or ≥50% reduction in LDL-C Alternative targets: ApoB ≤0.8 g/L Non-HDL-C ≤2.6 mmol/L
Low (10 year risk <10%)	LDL-C ≥5 mmol/L or evidence of genetic dyslipidemia	≥50% reduction in LDL-C

*eGFR ≤45 mL/min, ACR ≥30 mg/mmol or eGFR ≤60 mL/min + ACR ≥3 ma/mmol

**Hypertension +3 of: male, age >55 years, smoking, total cholesterol/HDL-C ratio >6, left ventricular hypertrophy, family history of premature cardiovascular disease, ECG abnormalities, microalbuminuria

Consider secondary testing in intermediate risk patients not candidates for treatment based on conventional risk factors or if treatment decisions are uncertain

Consider secondary testing in a subset of low risk patients (10 year risk 5-9%) for whom further risk assessment is indicated (premature family history of CAD, abdominal obesity, South Asian descent or IGT)

NB. These tests are considered optional and could include A1C. urine ACR, hs-CRP, ABI (if suspect peripheral vascular disease), exercise stress test





Explanations for the Preventive Care Checklist Form® (Page 5/6)

Immunizations

Tetanus (A):

- Routine booster doses every 10 years if had primary series
- Adults without a primary series need three doses.
- Primary adult series are given at time 0, 1-2 months, and 6-12 months.

Polio:

Give a primary series for previously unimmunized adults when a primary series of tetanus and diphtheria toxoid-containing vaccine is being given or with routine tetanus and diphtheria-toxoid containing vaccine booster doses

Pneumococcal vaccine (A): To all persons age >65 receive one dose pneumococcal-23 vaccine. May give an additional dose of the pneumococcal-C-13 vaccination at a different time if patient is high risk such as smokers, patients with alcoholism, patients who are homeless and those with chronic medical conditions

Influenza Vaccine (A)• Annually immunize the following: People at high risk of influenza-related complications or hospitalization

Adults (including pregnant women) and children with the following chronic health conditions:

- cardiac or pulmonary disorders (including bronchopulmonary dysplasia, cystic fibrosis and asthma)
- · diabetes mellitus and other metabolic diseases
- cancer, immune compromising conditions (due to underlying disease and/or therapy)
- renal disease
- · anemia or hemoglobinopathy
- conditions that compromise the management of respiratory secretions and are associated with an increased risk of aspiration
- morbid obesity (BMI ≥40)
- children and adolescents with conditions treated for long periods with acetylsalicylic acid
- people of any age who are residents of nursing homes and other chronic care facilities
- people ≥65 years of age
- all children 6 to 59 months of age
- · healthy pregnant women
- Aboriginal Peoples

People capable of transmitting influenza to those at high risk

- health care and other care providers in facilities and community settings who, through their activities, are capable of transmitting influenza to those at high risk of influenza complications.
- household contacts (adults and children) of individuals at high risk of influenza-related complications (whether or not the individual at high risk has been immunized):
- household contacts of individuals at high risk, as listed in the section above
- household contacts of infants <6 months of age as these infants are at high risk of complications from influenza but cannot receive influenza vaccine
- members of a household expecting a newborn during the influenza season
- those providing regular child care to children ≤59 months of age, whether in or out of the home
- those who provide services within closed or relatively closed settings to persons at high risk (e.g. crew on a ship)

Others

- people who provide essential community services
- people in direct contact during culling operations with poultry infected with avian influenza
- healthy persons aged 5-64 years who do not have contraindications to influenza vaccine are encouraged to be vaccinated

Rubella:

Give 1 dose to all susceptible adults. If vaccination is indicated, pregnant women should be immunized after delivery.

Measles & Mumps:

Give 1 dose to susceptible adults born in or after 1970. If born before 1970 consider them to be immune, unless high risk (eg. health care provider).

Varicella:

Susceptible adults should receive 2 doses. Routine testing is not advised.

Human Papillomavirus:

Women up to age 45 (any of HPV-2, HPV-4 and HPV-9 vaccine). Men up to age 26, men who have sex with men (either HPV-4 or HPV-9 vaccines).

Pertussis

Single dose of acellular pertussis vaccine to all adults who have not received a dose in the past.

Adults who will be in close contact to young infants should be immunized as soon as possible.

Vaccinate in every pregnancy,

Meningococcal vaccine:

Adults up to and including 24 years of age if not immunized in adolescence should receive 1 dose.

Herpes zoster vaccine:

For ≥50 years, 2 doses of recombinant zoster vaccine 2 to 6 months apart.

Endorsed by:



Explanations for the Preventive Care Checklist Form® (Page 6/6)

References	

Please note:

Bold = Grade A, or strong evidence (from the Canadian Task Force on Preventive Health Care)

Italics = Grade B, or weak evidence (from the Canadian Task Force on Preventive Health Care)

Plain text = Guidelines (from other Canadian sources)

(See reverse for references, insert for explanations)

PH1806GB1597

