

Recommendations on Behavioural Interventions for Prevention and Treatment of Cigarette Smoking in School-aged Children and Youth 2017

Canadian Task Force on Preventive Health Care
(CTFPHC)



Putting Prevention
into Practice

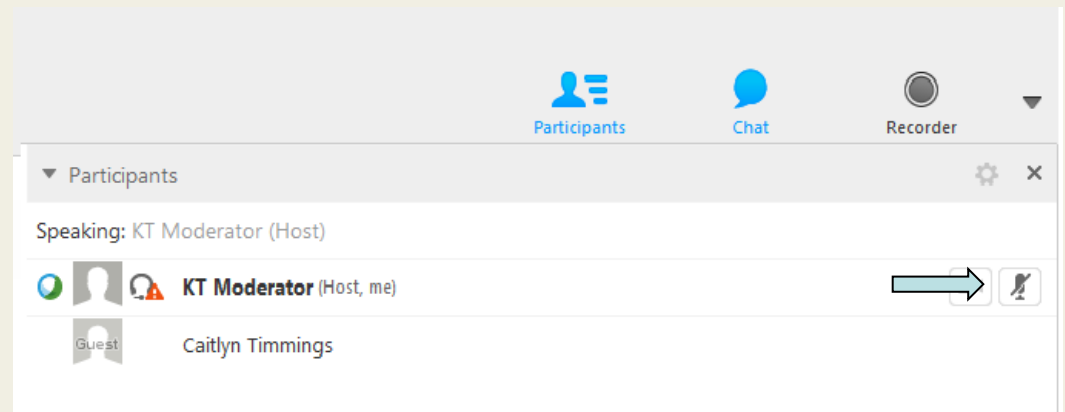
Canadian Task Force on Preventive Health Care
Groupe d'étude canadien sur les soins de santé préventifs

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WebEx – How can I participate today?

Audio option- you can ask questions and participate directly in the discussion by unmuting your audio.

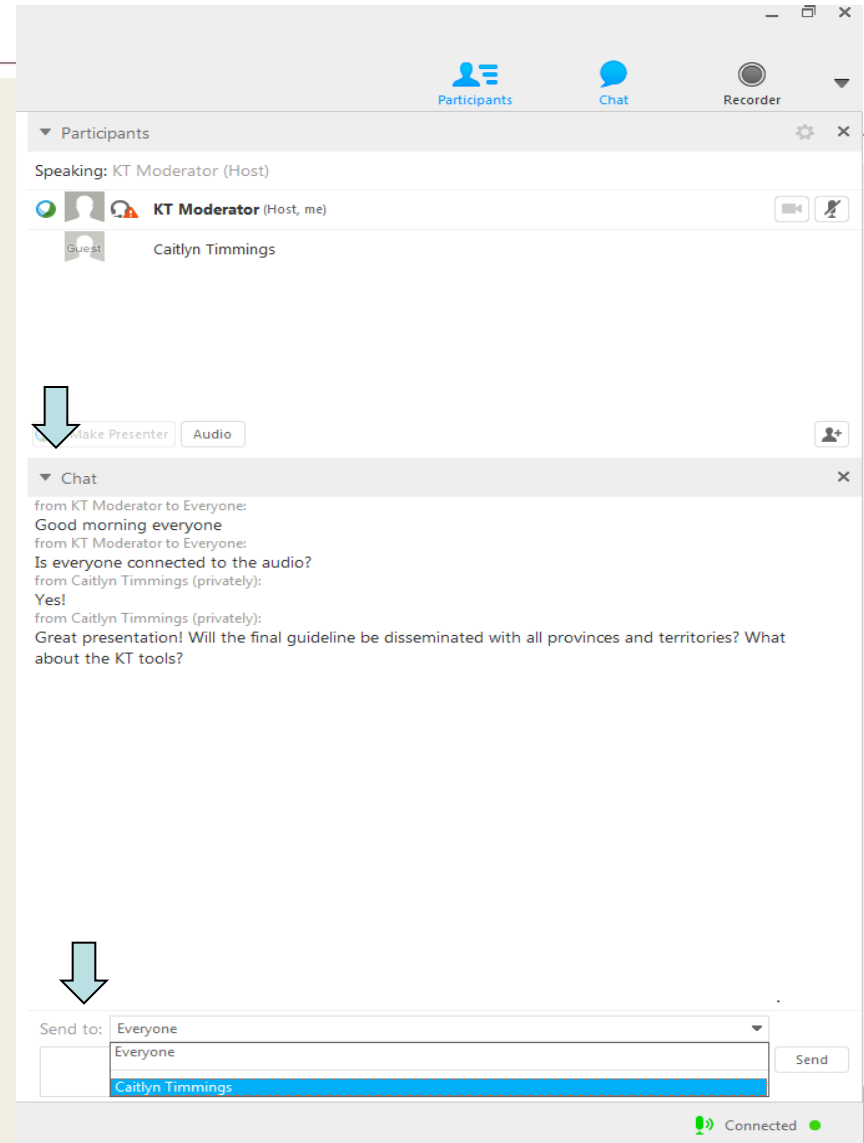
- Mute or unmute your audio on your phone or by clicking on the microphone next to your name in the participant list.



WebEx – How can I participate today?

Chat Box option- you can also type your questions or comments into the chat box.

1. You can send comments to everyone
2. You can send comments directly to the KT moderator (to read to the group) or to individual participants



The screenshot displays the WebEx meeting interface. At the top, there are icons for Participants, Chat, and Recorder. Below these is a 'Participants' panel showing 'Speaking: KT Moderator (Host)' and a list of participants including 'KT Moderator (Host, me)' and 'Guest Caitlyn Timmings'. A blue arrow points to the 'Make Presenter' and 'Audio' buttons. Below the participants panel is the 'Chat' panel, which shows a message history: 'from KT Moderator to Everyone: Good morning everyone', 'from KT Moderator to Everyone: Is everyone connected to the audio?', 'from Caitlyn Timmings (privately): Yes!', and 'from Caitlyn Timmings (privately): Great presentation! Will the final guideline be disseminated with all provinces and territories? What about the KT tools?'. A second blue arrow points to the 'Send to:' dropdown menu, which is currently set to 'Everyone'. The dropdown menu is open, showing 'Everyone' and 'Caitlyn Timmings' as options. A 'Send' button is visible to the right of the dropdown. At the bottom right, there is a 'Connected' status indicator with a green dot.

Use of slide deck

- These slides are made available publicly following the guideline's release as an educational support to assist with the dissemination, uptake, and implementation of the guidelines in primary care practice.
- Some or all of the slides in this slide deck may be used in educational contexts.

Overview of Presentation

- Background on Tobacco Smoking in Children and Adolescents
- Methods of the CTFPHC
- Recommendations and Key Findings
- Implementation of Recommendations
- Conclusions
- Questions and Answers

CTFPHC Working Group Members

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**non-voting member*

Tobacco Smoking Prevention and Treatment in Children and Adolescents

BACKGROUND

Background

- Tobacco kills up to half of its users globally
 - The global tobacco epidemic is one of the largest public health threats
- Tobacco users who die prematurely:
 - Deprive their families of income
 - Raise the cost of health care
 - Hinder economic development
- Annual cost to Canadian society was estimated at **\$17 billion in 2002**
- Among Canadian youth, **18% have tried cigarettes**
 - Increasing from 3% of 6th graders up to 36% of 12th graders

A person who starts smoking as a child or youth is **less likely to quit later in life** than someone who starts later

Guideline Scope

- This guideline presents evidence-based recommendations for the prevention and treatment of tobacco smoking in **children and youth (5-18 years)**
- The Canadian Task Force on Preventive Health Care (CTFPHC) has **not made previous recommendations on this topic**

Tobacco Smoking Prevention and Treatment in Children and Adolescents

METHODS

Methods of the CTFPHC

- Independent panel of:
 - Clinicians and methodologists
 - Expertise in prevention, primary care, literature synthesis, and critical appraisal
 - Application of evidence to practice and policy
- Tobacco Working Group
 - 4 CTFPHC members
 - Establish research questions and analytical framework

Methods of the CTFPHC

- **Evidence Review and Synthesis Centre (ERSC)**
 - Undertakes a systematic review of the literature based on the analytical framework
 - Prepares a systematic review of the evidence with GRADE tables
 - Participates in working group and task force meetings
 - Obtains expert opinions

CTFPHC Review Process

- Internal review process involving guideline working group, CTFPHC, scientific officers, and ERSC staff
- External review process involving key stakeholders
 - Generalist and disease-specific stakeholders
 - Federal and Provincial/Territorial stakeholders
- CMAJ undertakes an independent peer review process to review guidelines

Research Questions

- The systematic review for tobacco prevention and treatment included:
 - (2) key research questions on prevention with (2) sub questions
 - (3) key questions on treatment with (2) sub questions
 - (2) contextual questions
- Based on the search done for the 2012 United States Preventive Services Task Force (USPSTF) review on the same topic
- For more detailed information, please access the systematic review www.canadiantaskforce.ca

Analytical Framework: Prevention & Treatment

Prevention

school-aged children and youth (5-18 years) who have never smoked tobacco or are not currently smoking tobacco

interventions to prevent tobacco smoking

KQ1

incidence of tobacco smoking

prevalence of adult tobacco smoking

KQ2

Treatment

school-aged children and youth (5-18 years) who currently smoke tobacco

interventions to treat tobacco smoking

KQ3

incidence of stopping tobacco smoking

prevalence of adult tobacco smoking

KQ4

KQ5

Harms of treatment

Research Questions

Prevention

KQ1 Are behaviourally-based interventions that are designed to prevent tobacco smoking **effective in preventing children/youth from trying or taking up** tobacco smoking?

KQ2 Are behaviourally-based interventions designed to prevent tobacco smoking in children/youth **effective in reducing tobacco smoking during adulthood?**

Treatment

KQ3 Are behaviourally-based and non-pharmacological alternative and complementary interventions **effective in achieving smoking cessation?**

KQ4 Are behaviourally-based and non-pharmacological alternative and complementary interventions **effective in reducing future tobacco smoking in adulthood?**

KQ5 **What if any, adverse effects** are associated with behaviourally-based and non-pharmacological alternative and complementary interventions designed to help children/youth stop ongoing tobacco smoking?

Eligible Study Types

Population: School-aged children (5-12 years) and adolescents (13-18 years)

Product: Combustible tobacco products (e.g. cigarettes) (*excludes:* smokeless tobacco products or e-cigarettes)

Language: English, French (French studies published after 2012)

	KQ1,KQ2: Prevention	KQ3-KQ5: Treatment
Study Type	Randomized controlled trials (RCTs) that have a minimum of 30 participants per arm/group of interest for baseline measures	<i>Benefits:</i> RCTs that have a minimum of 30 participants per arm/group of interest for baseline measures <i>Harms:</i> RCT or comparative observational designs and there are no conditions regarding sample size
Outcomes	<i>Benefits:</i> incidence of tobacco smoking; prevalence of adult tobacco smoking	<i>Benefits:</i> incidence of stopping tobacco smoking; prevalence of adult tobacco smoking <i>Harms:</i> adverse effects of interventions (e.g., anxiety, pain, discomfort, infection)

How Does the CTFPHC Grade Evidence?

The “**GRADE**” System:

- **G**radings of **R**ecommendations, **A**ssessment, **D**evelopment & **E**valuation

1. Quality of Evidence

- Confidence that the available evidence **correctly reflects the theoretical true effect**

High, Moderate, Low, Very Low

2. Strength of Recommendation

- Quality of **supporting evidence**
- **Desirable and undesirable effects**
- **Values and preferences**
- **Resource use**

Strong, Weak

Interpretation of Recommendations

Implications	Strong Recommendation	Weak Recommendations
For patients	<ul style="list-style-type: none">• Most individuals would want the recommended course of action;• only a small proportion would not.	<ul style="list-style-type: none">• The majority of individuals in this situation would want the suggested course of action but many would not.
For clinicians	<ul style="list-style-type: none">• Most individuals should receive the intervention.	<ul style="list-style-type: none">• Recognize that different choices will be appropriate for individual patients;• Clinicians must help patients make management decisions consistent with values and preferences.
For policy makers	<ul style="list-style-type: none">• The recommendation can be adapted as policy in most situations.	<ul style="list-style-type: none">• Policy making will require substantial debate and involvement of various stakeholders.

Tobacco Smoking Prevention and Treatment in Children and Adolescents

RECOMMENDATIONS & KEY FINDINGS

Tobacco Smoking in Children and Adolescents: Prevention Recommendation

- These guidelines provide recommendations for practitioners on preventive health screening in a primary care setting

We recommend asking children and youth (5-18 years) or their parents about tobacco use by the child or youth and offering brief information and advice as appropriate during primary care visits to prevent initiation of tobacco smoking

- ***Weak recommendation, low quality evidence***
- Applies to children and youth (5-18 years) who:
 - Do not currently smoke tobacco (includes never or former smokers)
 - Do not have cognitive deficits
 - Do not have mental or physical health issues
 - Do not have a history of alcohol or drug abuse

Tobacco Smoking in Children and Adolescents: Treatment Recommendation

- These guidelines provide recommendations for practitioners on preventive health screening in a primary care setting

We recommend asking children and youth (5-18 years) or their parents about tobacco use by the child or youth and offering information and brief advice, as appropriate, during primary care visits to treat tobacco smoking among children and youth who have smoked in the last 30 days

- ***Weak recommendation, low quality evidence***
- Applies to children and youth (5-18 years) who:
 - Have smoked tobacco within the past 30 days
 - Do not have cognitive deficits
 - Do not have mental or physical health issues
 - Do not have a history of alcohol or drug use

Rationale for Recommendations

- Recommendations are in favour of low-intensity, behavioural preventive and treatment interventions for children/youth, because of the:
 - Potentially **moderate reduction in smoking initiation**
 - **Modest increase in the likelihood that youth will stop** smoking
 - **Similar size effect of low and high intensity** interventions
 - **High likelihood that harms** of preventive or treatment interventions are **minimal**
 - Fact that **stakeholders find interventions important and acceptable**
- The recommendations on both prevention and cessation are **based on limited evidence**, and, thus, are weak because of **low certainty** that the:
 - **Evidence reflects the true effect** of behavioural interventions, for either prevention or treatment of smoking
 - **Lack of evidence that any benefit**, if present, **would be sustained or have longer-term health benefits**

Comparison: CTFPHC guideline vs. other recommendations

Organization	Recommendation	
	Prevention	Treatment
Canadian Task Force on Preventive Health Care (current)	Ask about tobacco use and offer brief information and advice at appropriate primary care visits to prevent tobacco smoking among children and youth (5-18 years).	Ask about tobacco use and offer information and brief advice (i.e. low intensity behavioral interventions) at appropriate primary care visits to treat tobacco smoking among children and youth (5-18 years) who have smoked within the last 30 days.
Canadian Paediatric Society (2016)	Ask children, youth and families about tobacco use and exposure and provide age-appropriate information and counselling to prevent initiation as part of routine health care.	Offer counseling for smoking cessation. Stay aware of research on pharmaceutical cessation interventions for teens and adults and prescribe effective medications as indicated, in combination with counselling.
US Preventive Services Task Force (2013)	Provide interventions, including education or brief counselling, to prevent initiation of tobacco use in school-aged children and adolescents.	Recommendations were not made for or against treatment.

Comparison: CTFPHC guideline vs. other recommendations

Organization	Recommendation	
	Prevention	Treatment
Canadian Action Network for the Advancement, Dissemination and Adoption of Practice-informed Tobacco Treatment (CAN-ADAPTT) (2011)	Obtain information about tobacco use on a regular basis. Provide counselling that supports abstinence from tobacco to children and adolescents.	Provide counselling that supports tobacco cessation among children and adolescents who use tobacco.
American Academy of Pediatrics (2009)	Screen for tobacco use and tobacco smoke exposure, counsel children and parents about the harms of tobacco at most visits.	Provide advice to tobacco users about cessation strategies and resources at most visits.
New Zealand Ministry of Health (2007)	No recommendation	Give brief advice to stop smoking to all people who smoke; provide evidence-based cessation support for people who express a desire to stop smoking; recommend smoking cessation treatments of proven effectiveness to people interested in stopping smoking.
Institute for Clinical Systems Improvement (US) (2013)	Establish tobacco use status for all patients and reassess at every opportunity. Reinforce non-users to continue avoiding tobacco products.	Recommend ongoing cessation services to all tobacco users.

Knowledge Gaps

- **Lack of high-quality RCTs** that examine the **short and long-term benefits** of behavioural prevention and treatment interventions
- More research is needed to **identify the characteristics of the most effective interventions**, including factors such as the:
 - Type of advice provided
 - Duration of the intervention
 - Type of provider
 - Contact time needed
- No conclusive evidence in either adults or youth on the potential harmful effects of **e-cigarettes** or whether they can be used in smoking cessation
- Further research is needed to **assess the benefits and harms** of interventions in **at risk populations**

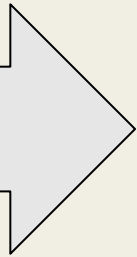
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IMPLEMENTATION OF RECOMMENDATIONS

Considerations for Implementation

- **Primary care practitioners** implement procedures to **assess smoking risk and/or status** in a child or youth

If practitioner **determines likely need** for a prevention or cessation intervention



Primary care practitioner should ask if the **child/youth** and/or **parent** would consider having a **brief conversation** that may help the child/youth:

- Prevent the uptake of smoking
- Stop smoking

- Most children and youth and their parents/caregivers would want the child or youth to receive the recommended course of action
 - Many would not (*implication of a weak recommendation*)
 - For those who consent, primary care practitioners should offer them **brief information and advice** at **appropriate primary care visits**

Considerations for Implementation

- **Primary care practitioners** who may deliver the intervention include:
 - Family physicians, nurses, or other appropriate members of the health care team
- Brief information and advice may include **verbal communication of up to five minutes** to discuss **patient attitudes and beliefs, risks of smoking**, and/or **strategies for dealing** with the influence of **peers**
- Sharing of **printed or electronic material** (brochures, newsletters and interactive computer programs) could be considered
- Appropriate primary care visits include **scheduled health supervision visits**, visits for **immunizations or medication renewal**, **episodic** care or **acute** illness, and **other** visits

Values and Preferences

- **CTFPHC did not conduct a full systematic review of the evidence on parental preferences or values**
 - Neither youth nor clinician preferences were examined due to resource limitations
- The CTFPHC recruited parents of school-aged children and youth (smokers and non-smokers) for a **focus group** (n=10) and **subsequent survey** (n=13)
 - **Parents agreed it is important to offer prevention and treatment interventions**, but would want to be informed about the components of offered interventions
 - Some parents **questioned primary care settings as the best place** for behavioural interventions
- **Better data is needed** on the values and preferences of children and youth

Knowledge Translation Tools

- The CTFPHC creates KT tools to support the implementation of guidelines into clinical practice
- After the public release, these tools will be freely available for download in both French and English on the CTFPHC website: www.canadiantaskforce.ca

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CONCLUSIONS

Conclusions: Key Points

- The evidence suggests that low-intensity behavioural interventions based on providing information and advice aimed at prevention and treatment of smoking among children and youth may be effective
- The CTFPHC therefore recommends that primary care practitioners consider offering them to children and youth aged 5 to 18 years

More Information

For more information on the details of this guideline please see:

- Canadian Task Force for Preventive Health Care website: <http://canadiantaskforce.ca>

Questions & Answers

Thank you