



Treating Tobacco Use Disorder

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Land Acknowledgement

We respectfully acknowledge the land on which we work is the traditional territory of the Coast Salish Peoples, including the unceded homelands of x^wməθkwəy'əm (Musqueam), Skwxwú7mesh (Squamish), and Səl'ílwətał (Tsleil-Waututh) Nations



Disclosure

- *I have received unrestricted research funding/grants, speaker's honoraria, consultation fees or product from the following in the previous 24 months:*

Health Canada

University of British Columbia

Ottawa Heart Institute

Providence Health Care

Horizon Health Authority

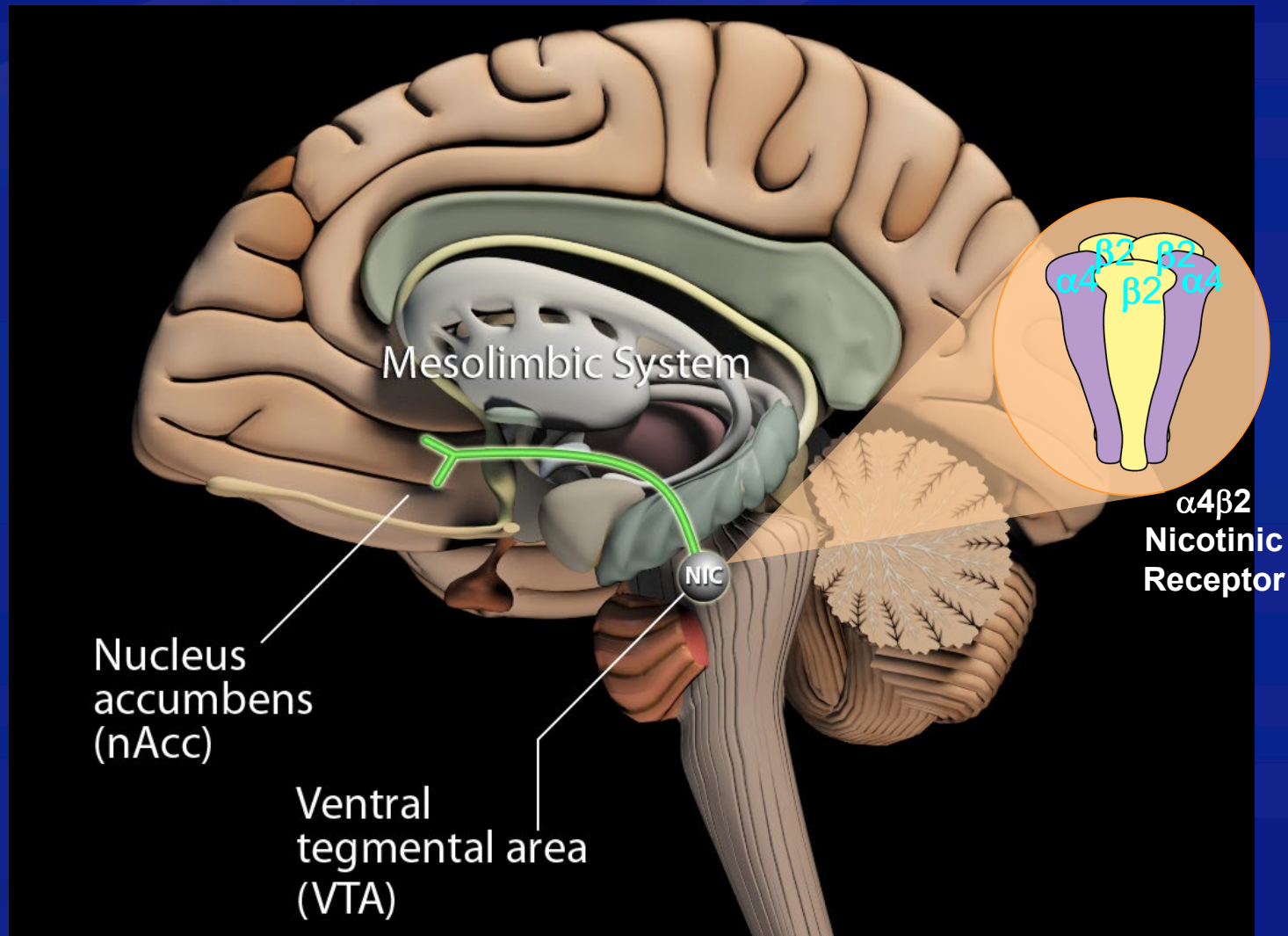
TEACH (Centre for Addiction and Mental Health)

**No tobacco industry or electronic cigarette industry funding (current or previous)*

Learning Objectives

- *Understand the nature of TUD as a chronic disease*
- *Review “brief intervention” for tobacco users*
- *Become familiar with evidence-based interventions for TUD*
- *Review of the vaping debate*

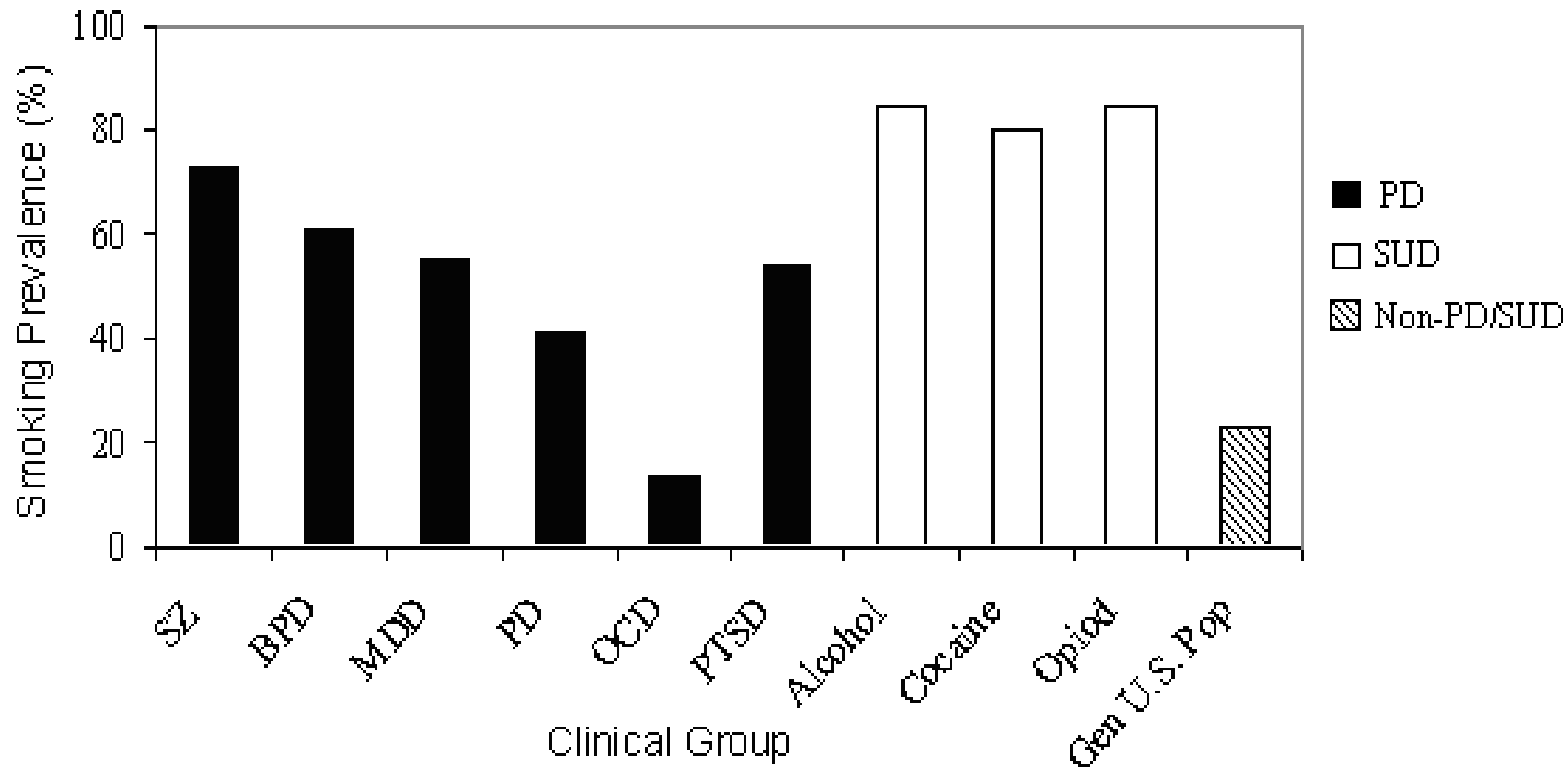
Neurobiology of Tobacco Use Disorder



10 Key Recommendations

1. *Recognize tobacco dependence as a chronic disease*
 - *Repeated intervention and multiple quit attempts may be necessary*
2. *Document smoking status and willingness to quit on a regular basis*
3. ***Support every patient identified as willing to quit with counselling and medications***
 - ***Tobacco dependence treatments work across a broad range of populations***
4. *Understand that even brief tobacco dependence treatment can be effective*
5. *Use individual, group, and telephone counselling*
 - *More intense treatment increases effectiveness*
 - *Practical tips on how to quit and providing social support as part of treatment improves success rates*

Prevalence of Smoking: Psychiatric and Substance Use Disorders



A Brief Smoking Cessation Intervention

- ASK:*** about tobacco use
- ADVISE:*** every tobacco user to quit
- ASSESS:*** assess readiness to quit
- ASSIST:*** self-help material
pharmacotherapy
counselling/quit lines
- ARRANGE:*** follow up or referral

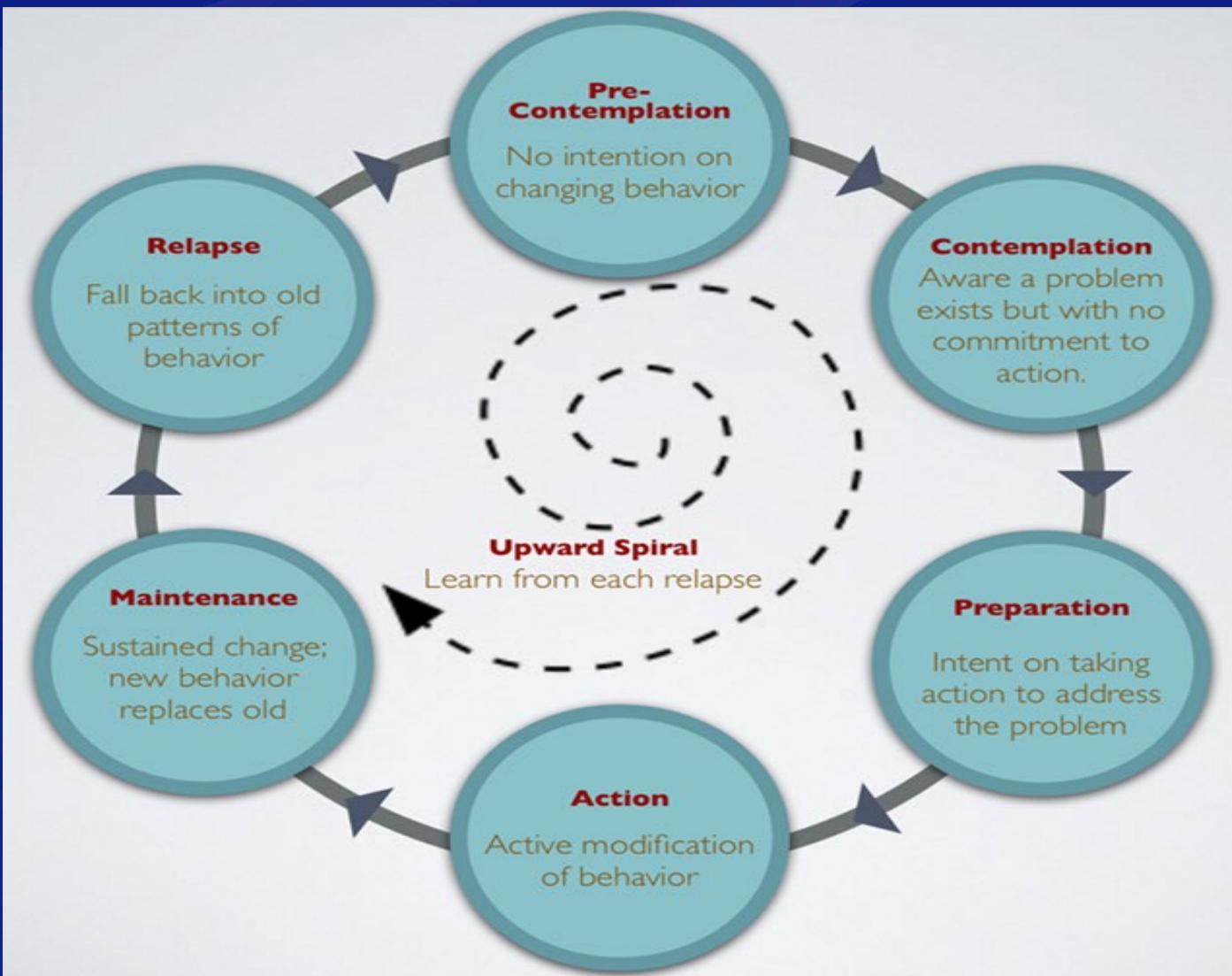
Non-Pharmacological Treatment for Smoking Cessation

Comparison	Trials (n)	Participants (n)	Pooled OR [†] (95% CI)
<p>▶ Physician advice¹ Brief vs. no advice (usual care) Intensive vs. minimal advice</p>	17 15	>13,000 >9,000	1.66 (1.42–1.94) 1.37 (1.20–1.56)
<p>▶ Individual counseling² vs. minimal behavior intervention</p>	17	>6,000	1.56 (1.32–1.84)
<p>▶ Group counseling³ vs. self-help vs. no intervention</p>	16 7	>4,000 815	2.04 (1.60–2.60) 2.17 (1.37–3.45)
<p>▶ Proactive Telephone counseling⁴ vs. less intensive interventions</p>	13	>16,000	1.41 (1.27–1.57)
<p>▶ Self-help⁵ vs. no intervention</p>	11	>13,000	1.24 (1.07–1.45)

[†]OR= odds ratio. Abstinence assessed at least 6-months following intervention.

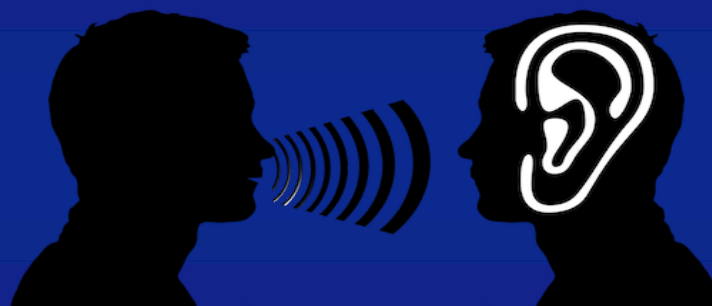
1. Stead LF, Bergson G, Lancaster T. *Cochrane Database of Syst Rev* 2008;(2): CD000165. 2. Lancaster T, Stead LF. *Cochrane Database Syst Rev* 2005;(2):CD001292. 3. Stead LF, Lancaster T. *Cochrane Database Syst Rev* 2005;(4): CD001007. 4. Stead LF et al. *Cochrane Database Syst Rev* 2005;(4):CD002850. 5. Lancaster T, Stead LF. *Cochrane Database Syst Rev* 2005;(3):CD001118.

The Challenge of Ambivalence



Principles of Motivational Interviewing

- Express Empathy
- Develop Discrepancy
- Roll with Resistance
- Support Self Efficacy



First-line Pharmacotherapies for Tobacco Dependence¹

- Nicotine replacement therapy (NRT)
 - Patch
 - Gum
 - Inhaler
 - Nasal spray (*Not available in Canada*)
 - Lozenges
- Antidepressant
 - Bupropion SR
- Nicotinic acetylcholine receptor partial agonist
 - Varenicline

NRT Combinations

- Common to combine patch + gum/lozenge/inhaler/oral spray
- More efficacious than monotherapy
- Considered safe (FDA 2013)



1. Mills E.J. et al. Comparison of high-dose and combination NRT, varenicline and bupropion for smoking cessation: a systematic review and multiple treatment analysis. *Ann Med* 2012 Sep; 44(6): 588-97

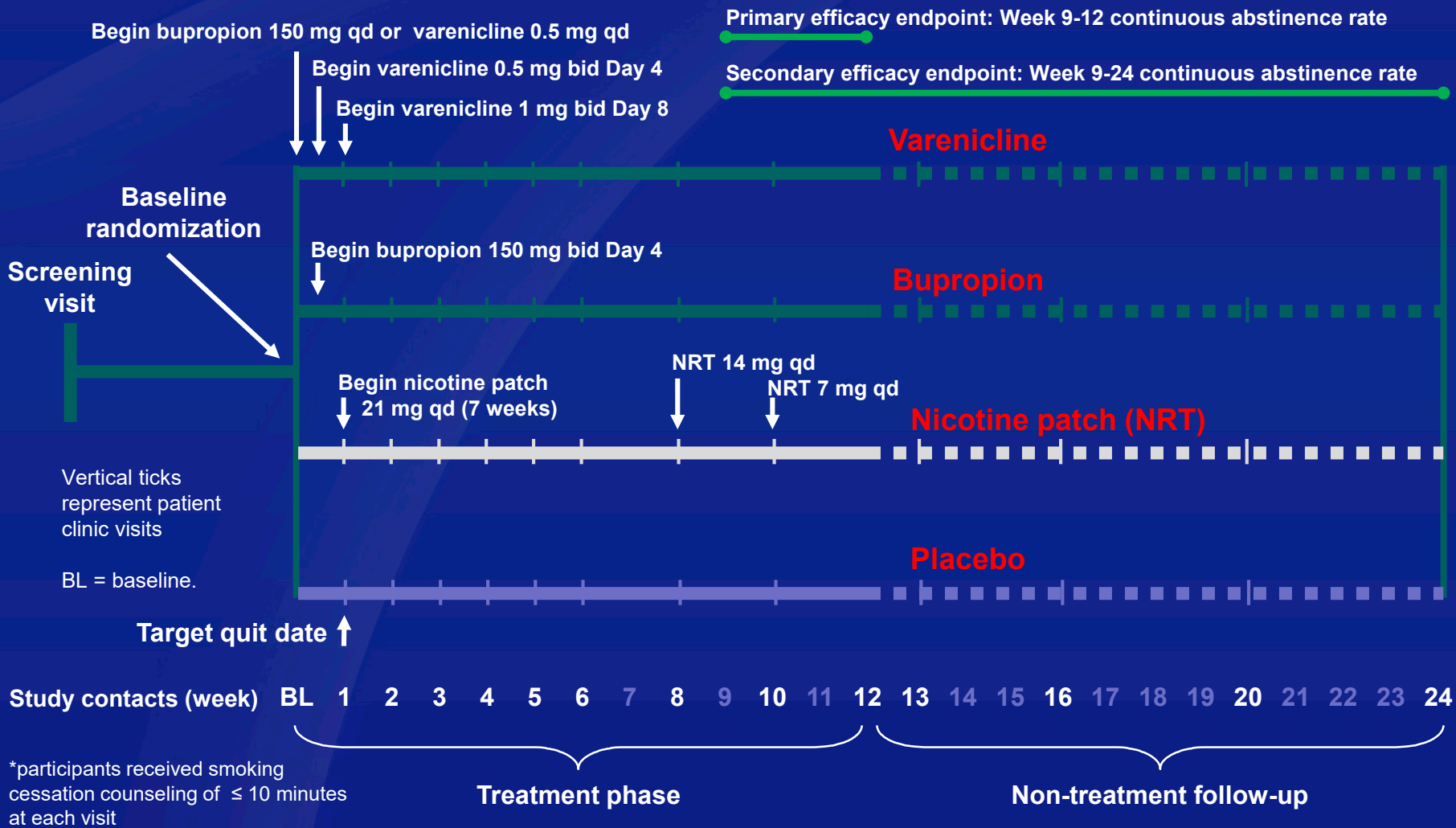
2. Cahill K et al. Pharmacological interventions for smoking cessation: an overview and meta-analysis. *Cochrane Database Syst. Rev* 2013 May 31

FDA Proposed Label Changes

- *NRT use permitted whilst still smoking*
- *Use of multiple NRT products allowable*
- *Safe to extend treatment beyond label recommendation*



EAGLES Study Diagram



EAGLES: Authors' Conclusions

- **Neuropsychiatric Safety**
 - **The EAGLES trial provides evidence that varenicline and bupropion do not pose a neuropsychiatric safety risk**
 - **These drugs can be used safely by smokers without a history of psychiatric disorders and by smokers with stable psychiatric disease**
- **Efficacy**
 - **Varenicline, bupropion, and NRT transdermal patches are more effective than placebo in aiding smoking cessation in patients with and without a history of psychiatric disorder**
 - **Varenicline is more effective than bupropion and NRT in psychiatric and non-psychiatric cohorts**



An Alternative Approach To Cessation: “Reduce to Quit”

- *Reducing cigarettes pre-quit day, and abrupt cessation approaches produce similar quit rates*
- *Patients should be given the choice to quit via either approach*
- *Reduction approaches can include the use of pre-quit nicotine replacement therapy (NRT)*
- *Cigarette smoking and concurrent NRT does not pose increased risk*



BC Smoking Cessation Program

- *BC Smoking Cessation Program since Sept 2011*
- *12 weeks per year of NRT or Varenicline /Zyban*
- *Process changed Jan 1st 2016 (no 811 call, more options)*



E-Cigarette Products

The Evolution of E-Cigarette, or Vaping, Products



1st
GENERATION

Disposable
e-cigarettes



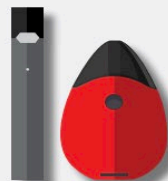
2nd
GENERATION

E-cigarettes
with prefilled
or refillable
cartridge



3rd
GENERATION

Tanks or Mods
(refillable)

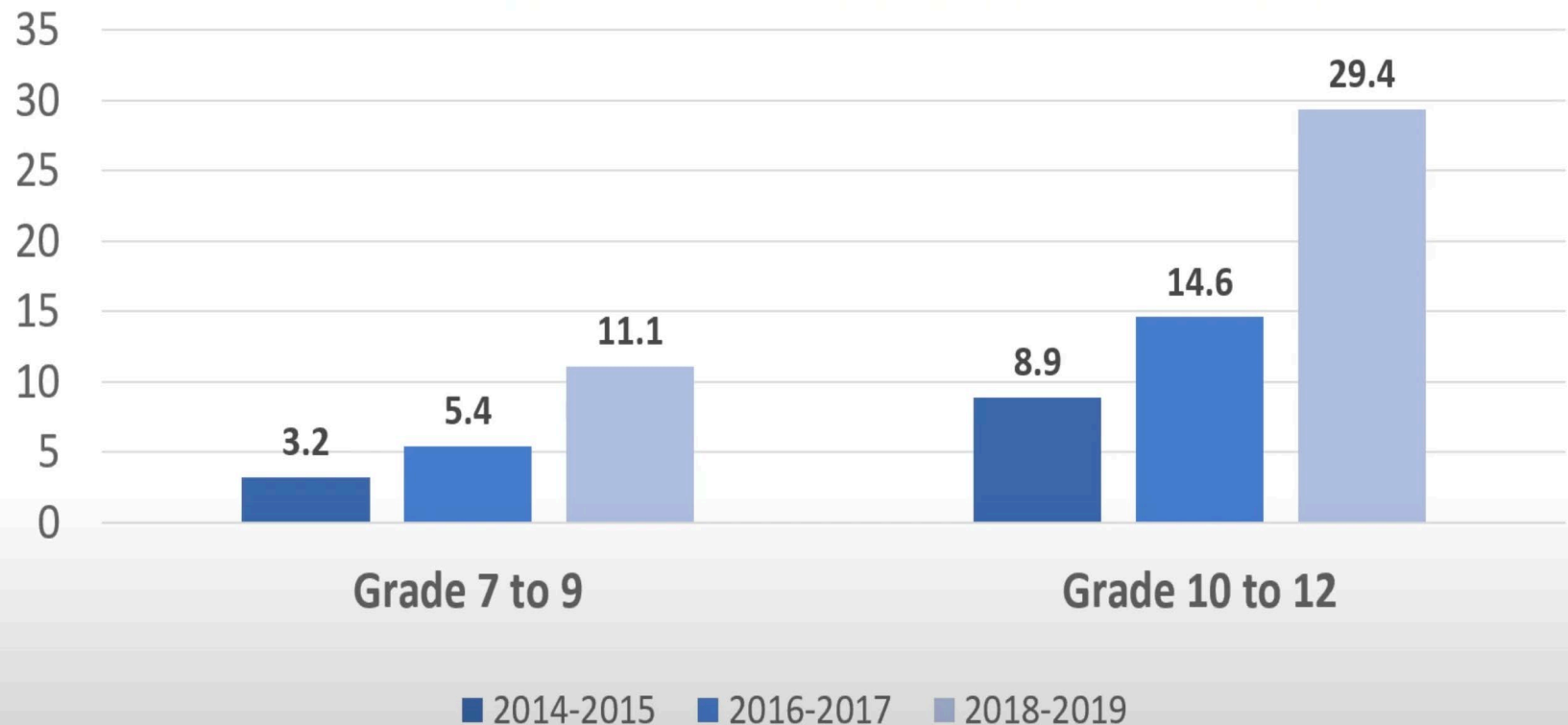


4th
GENERATION

Pod Mods
(prefilled or
refillable)

Youth Prevalence

Youth Vaping in Canada (past 30 days)



Source: Canadian Student Tobacco Alcohol and Drugs Survey (CSTADS), 2014-2015, 2016-2017, 2018-2019

Safety



Public Health
England

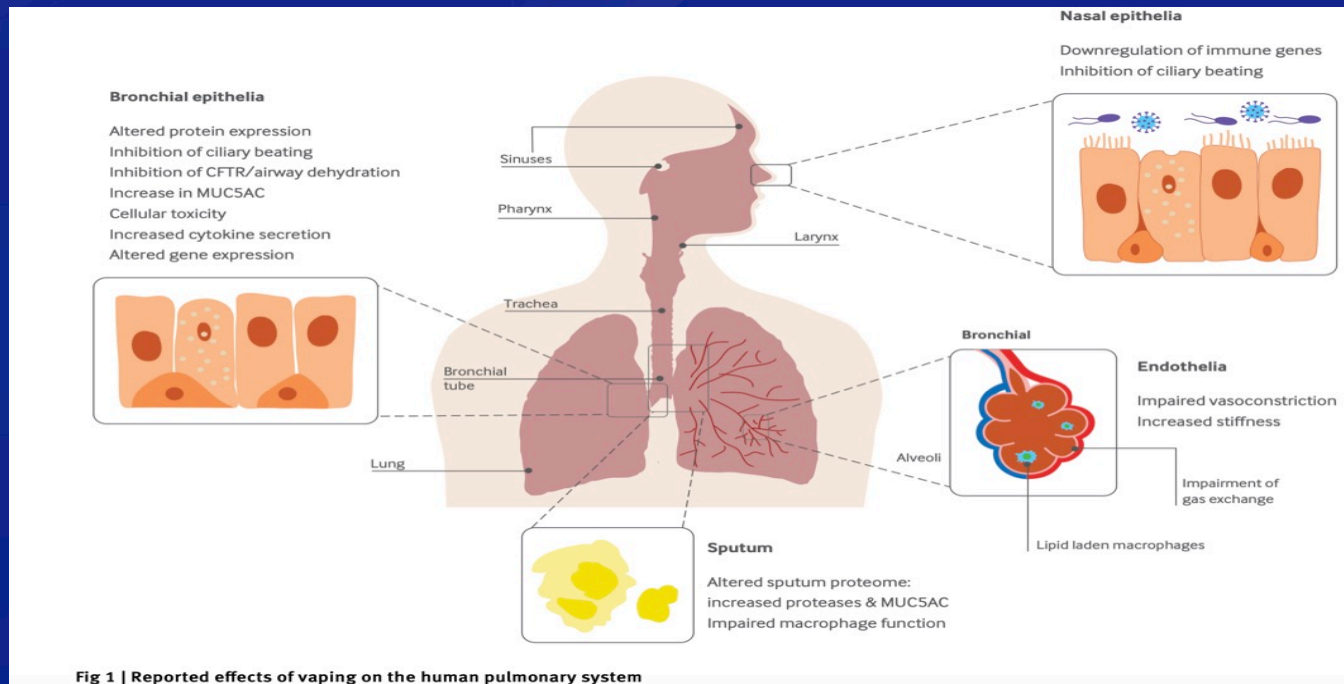
95% LESS HARMFUL
THAN SMOKING

PUBLIC HEALTH ENGLAND (PHE)

THE MESSAGE IS SIMPLE

Safety

What are the respiratory effects of e-cigarettes? A review of the evidence



- “.....current knowledge of these effects is insufficient to determine whether the respiratory health effects of e-cigarette are less than those of combustible tobacco products.”

Patterns of Use

AMONG HIGH SCHOOL CURRENT E-CIGARETTE USERS — Rise in Frequency



E-cigarettes for Smoking Cessation?

Can electronic cigarettes help people quit smoking?

Key messages

- There is high-certainty evidence that electronic cigarettes with nicotine increase quit rates compared with nicotine replacement therapy.
- There is moderate-certainty evidence that e-cigarettes with nicotine increase quit rates compared with e-cigarettes without nicotine.
- We did not detect any clear evidence of harm from nicotine e-cigarettes when used to quit smoking; however, longest follow-up was two years and the overall number of studies was small.

Hartmann-Boyce J, Lindson N, Butler AR, McRobbie H, Bullen C, Begh R, Theodoulou A, Notley C, Rigotti NA, Turner T, Fanshawe TR, Hajek P. Electronic cigarettes for smoking cessation. *Cochrane Database of Systematic Reviews* 2022, Issue 11; DOI 10.1002/14651858.CD010216.pub7



Smoking Cessation Group at VGH

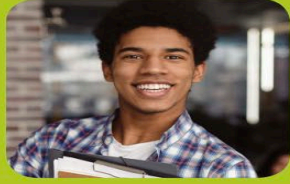
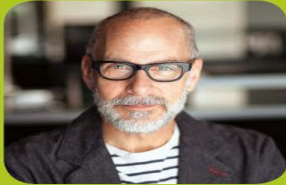


Take control of your tobacco use

Free drop-in smoking cessation group

- **Dates:** Starting Oct. 19, every Wednesday from 3:30 p.m. – 4:30 p.m.
- **Location:** Room 4166, Gordon and Leslie Diamond Health Care Centre, Vancouver General Hospital, 2775 Laurel Street, Vancouver
- **Further information:** Email: helptoquit@VCH.ca or call: 604.875.5052

VGH Smoking Cessation Clinic



FREE help to stop smoking or vaping

- Receive personalized counselling support and education by a doctor or nurse
- Learn more about products to help you stop smoking or vaping
- Appointments available in person, by phone or video

**No referral needed.
Book your appointment now.**

Did you know...

- Tobacco use remains the leading cause of preventable death in Canada
- Within 24 hours of not smoking or vaping, there are positive health benefits, including improved lung health

VGH Smoking Cessation Clinic

Gordon and Leslie Diamond
Health Care Centre

2775 Laurel Street (6th floor)
Vancouver, B.C.

604-875-4800 (select option 2)
cessationclinic@vch.ca