



A. ROKEN

B. METHODEN OM TE STOPPEN MET ROKEN

C. DAMPEN-VAPEN: E-SIGARET

D. TAKE HOME MESSAGES

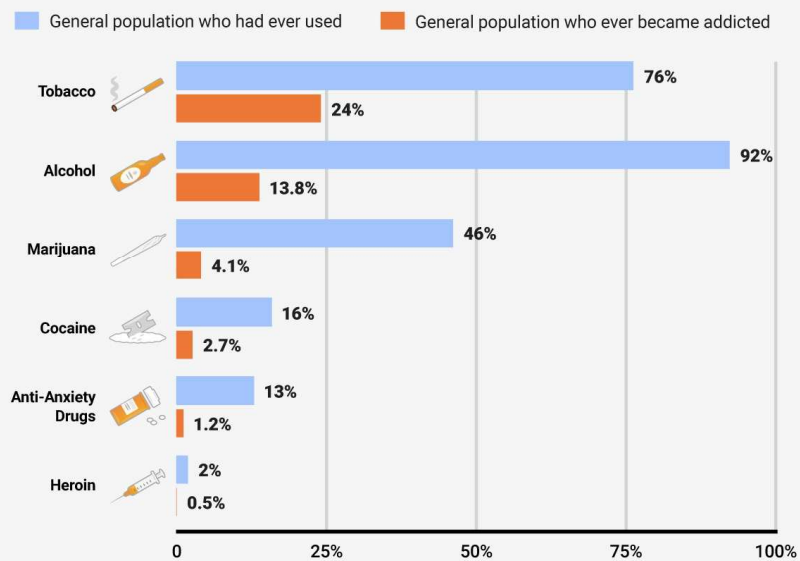
ROKEN: EEN WERELDWIJD FENOMEEN

WHO Region	Male prevalence	Female prevalence	Both sexes
Europe	38%	19%	28%
Western Pacific	48%	3%	26%
Eastern Mediterranean	37%	3%	20%
America	22%	13%	17%
South-East Asia	32%	2%	17%
Africa	25%	2%	13%
Global	36%	7%	21%

In 2015 waren er wereldwijd **933,1 miljoen** dagelijkse rokers.

WHO, 2015

DRUGS PEOPLE GET HOOKED ON



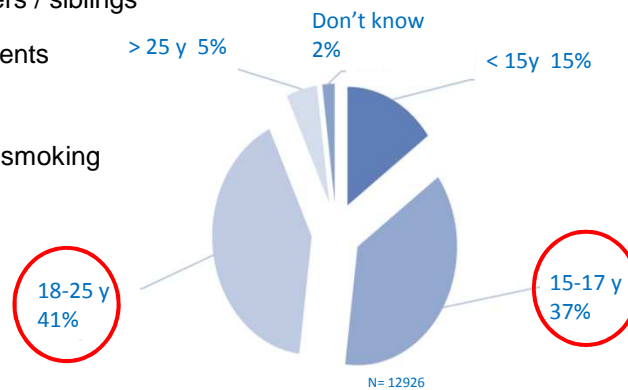
SOURCES: Institute of Medicine, 1999; US Department of Health, 2013; New York Times, 2014

BUSINESS INSIDER

SMOKING COMMONLY STARTS AT A YOUNG AGE

Factors associated with youth tobacco use include:

- Low socioeconomic status
- Smoking by peers / siblings
- Smoking by parents or guardians
- Perception that smoking is the norm



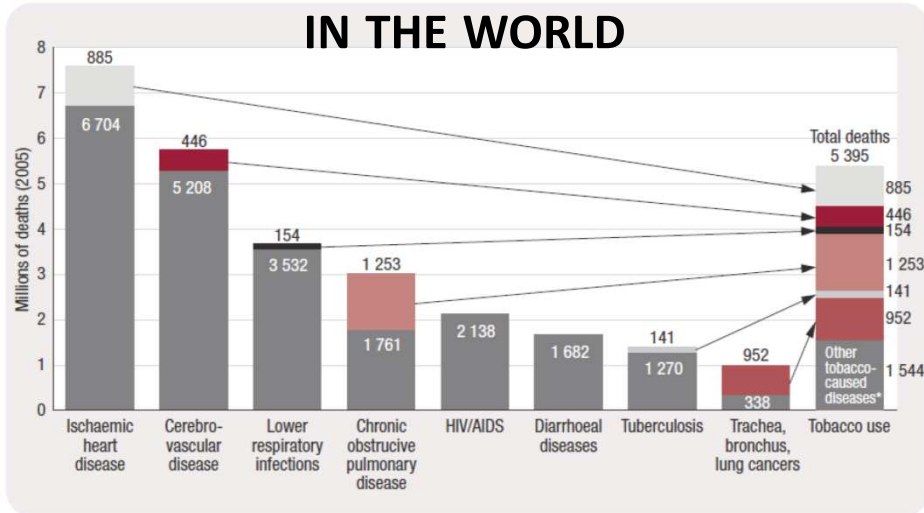
European Commission, Special Eurobarometer 458, 2017

ROKERS IN BELGIË

- **20% rookt** (25% : EU /wereld)
- **17% rookt dagelijks** (25% wereld)
- **25% rookt bij 25-34j en 8% bij 15-17j**
- Dagelijks gemiddeld **17 sigaretten/dag.** (14 sig/d EU)
- **Mannen roken meer** dan vrouwen (B: 24% vs 15%; EU: 30% vs 22% en wereldwijd: 25% vs 5%)
- **66%** van de rokers rookt **gewone sigaretten** en 29% van hen rookt roltabak.

Stichting tegen Kanker –2017
European Commission, Special Eurobarometer 458, 2017

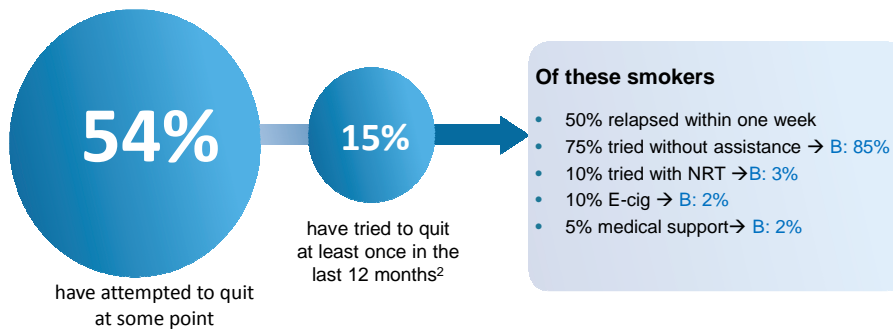
TOBACCO USE IS A RISK FACTOR FOR 6 OF THE 8 LEADING CAUSES OF DEATH IN THE WORLD



WHO, 2014

MANY EUROPEAN SMOKERS TRY AND FAIL TO QUIT

Of all European smokers:



N: 7293 European Commission, Special Eurobarometer 458, 2017
N: 727, Stichting Tegen Kanker, 2017



METHODEN OM TE STOPPEN MET ROKEN

1. Zelfhulp materiaal
2. Minimale interventie programma's
3. Psychologische benadering
4. Farmacologische hulpmiddelen

ZELFHULP MATERIAAL

BOEKEN	   		
BROCHURES	  		
INTERNET	advies@tabakstop.be	www.tabakstop.be	
TELEFONISCH		Tabakstoplijn gratis (0800/111 00)	

MINIMALE INTERVENTIE PROGRAMMA'S

Kort rookstopadvies (3-10 min)
5 A's en/of 5 R's
Elke gezondheidsmedewerker



Huisarts sleutelrol
1 op 4 van rokers ooit aangesproken door hun huisarts om te stoppen met roken

MINIMAAL

- Identificeren en registreren van rokers**
rookstatus
- Kort advies geven**
duidelijk, kortdaat, op maat, empathisch!

Stichting tegen kanker 2017

DO YOU WANT TO QUIT?

YES

MINIMAL

The 5 A's to Quit Tobacco

Ask _____
to quit at every visit.

Advice _____
to quit tobacco at every visit.

Assess _____
willingness to quit at every visit.

Assist _____
quitting within 2 weeks with pharmacotherapy or counseling.

Arrange _____
follow-up contact in 1st week after quitting.

NO

The 5 R's to the Patient Unwilling to Quit Tobacco

Relevance _____
why quitting is important to them.
(second hand exposure, overall health, etc.)

Risks _____
negative consequences of ongoing habit.

Rewards _____
benefits of tobacco cessation.

Roadblocks _____
identify impediments to quitting.
(withdrawal symptoms, fear, weight gain)

Repetition _____
repeat every time the patient comes to the clinic.

Send patient to smoking cessation clinic

Cambria et al; J Vasc Surg 2010;51:1529-37

PSYCHOLOGISCHE BENADERING

- **MOTIVATIONELE GESPREKSVOERING**
- **GEDRAGSTHERAPIE (EN COGNITIEVE GEDRAGSTHERAPIE)**
Gesprekstechnieken om individuen te motiveren tot gedragsverandering.
 - "the stages of change" en motivationeel interviewen.

Open vragen stellen, reflectief en empathisch luisteren, bevestigen, samenvatten, verandertaal uitlokken

Nieuw gedrag aanleren

- Bewust worden van het probleem
- Aanvoelen wanneer moeilijk
- Leren omgaan met moeilijke momenten

Social Work Podcast #53
Prochaska & DiClemente's Stages of Change Model

Australian Smoking Cessation Guidelines, 2016

EFFECT VAN PSYCHOLOGISCHE BENADERING

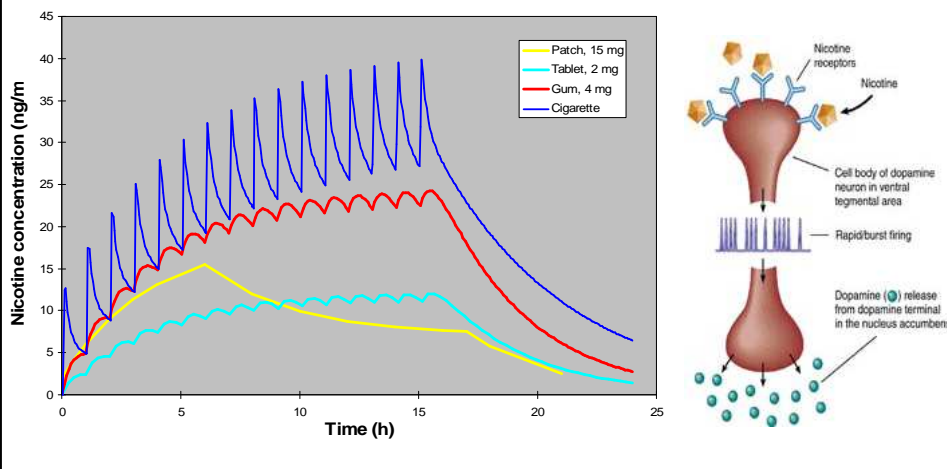
Level of contact	Number of arms	Estimated odds ratio (95% C.I.)	Estimated abstinence rate (95% C.I.)
No contact	30	1.0	10.9
Minimal counselling (< 3 minutes)	19	1.3 (1.01, 1.6)	13.4 (10.9, 16.1)
Low intensity counselling (3-10 minutes)	16	1.6 (1.2, 2.0)	16.0 (12.8, 19.2)
Higher intensity counselling (> 10 minutes)	55	2.3 (2.0, 2.7)	22.1 (19.4, 24.7)

Number of sessions	Number of arms	Estimated odds ratio (95% C.I.)	Estimated abstinence rate (95% C.I.)
0-1 session	43	1.0	12.4
2-3 sessions	17	1.4 (1.1, 1.7)	16.3 (13.7, 19.0)
4-8 sessions	23	1.9 (1.6, 2.2)	20.9 (18.1, 23.6)
> 8 sessions	51	2.3 (2.1, 3.0)	24.7 (21.0, 28.4)

Fiore MC, Bailey WC, Cohen SJ, et al. Clinical Practice Guideline: Treating Tobacco Use and Dependence - 2008 Update. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service; 2008.

Fiore MC et al, Clinical Practice Guideline, Treating use and dependence, 2008

NICOTINE REPLACEMENT THERAPY



VARENICLINE

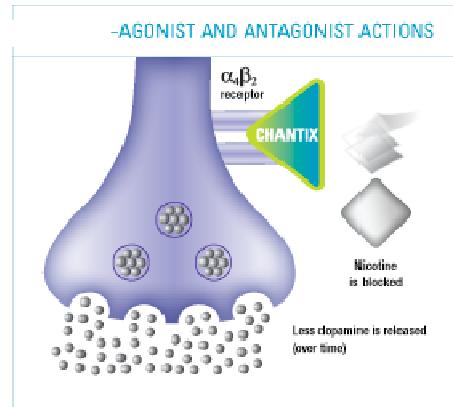
Varenicline is a high-affinity $\alpha 4\beta 2$ nicotinic acetylcholine receptor (nAChR)

Stimulating dopamine release through its agonist property

→ reduce craving and withdrawal symptoms

Blocking nicotine binding through varenicline's antagonist property

→ reduce the reinforcing effects of smoking

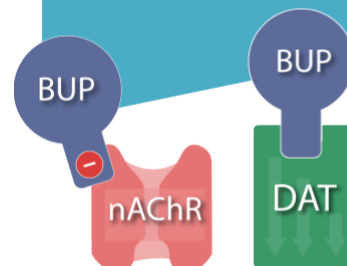


BUPROPION

- Een zwakke selectieve inhibitor van de heropname van noradrenaline en dopamine. Tevens minimaal effect op heropname serotonine.
- Niet-competitieve inhibitor van de $\alpha 4\beta 2$ en $\alpha 3\beta 2$

Mechanism unclear, might involve:

- Antagonism of nAChR
- Dopaminergic effect on reward mechanisms



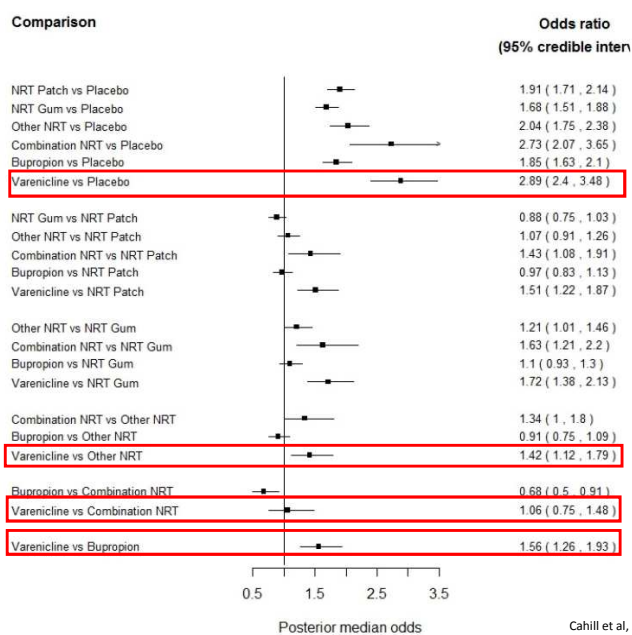
Quaack et al 2009 ERJ

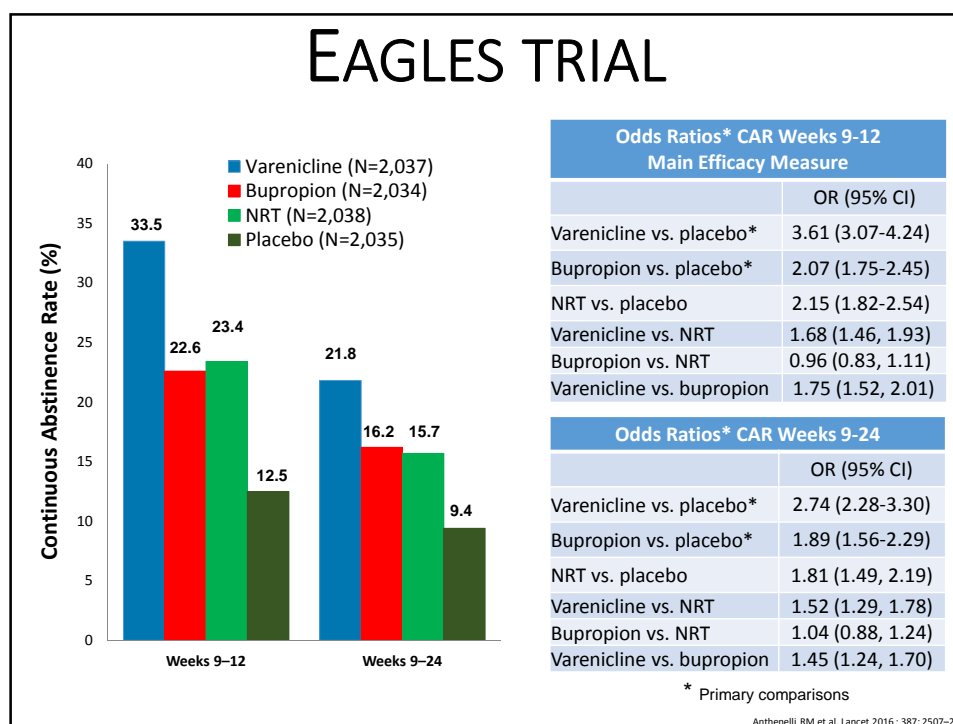
SMOKING CESSATION: PHARMACOTHERAPY VS. PLACEBO AT 6 MONTHS

	OR (95% CI)	Estimated Abstinence Rate (95% CI)
Placebo	1,0	
Monotherapies		
Varenicline	3,1 (2,5 - 3,8)	33,2 (28,9 - 37,8)
NRT patch high dose	2,3 (1,7 - 3,0)	26,5 (21,5 - 32, 7)
NRT gum (> 14 weeks)	2,2 (1,5 - 3,2)	26,1 (19,7 - 33,6)
Bupropion SR	2,0 (1,8 - 2,2)	24,2 (22,2 - 26,4)
Combination therapies		
cNRT (patch + ad lib NRT)	3,6 (2,5 - 5,2)	36,5 (28,6 - 45,3)

Fiore et al., 2008 Clinical Practice Guideline. Treating Tobacco use and Dependence

SMOKING CESSATION: PHARMACOTHERAPY

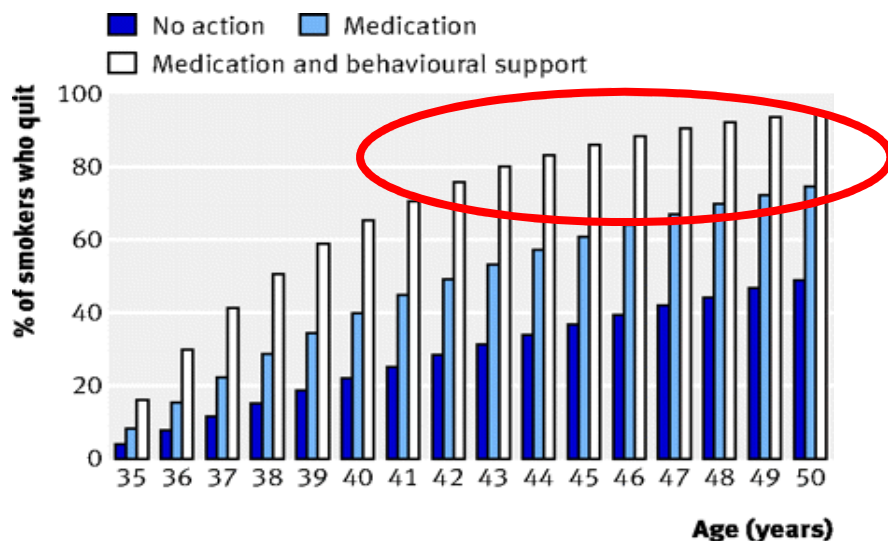




	NRT	Varenicline	Bupropion
Bijwerkingen 1/10	-Irritatie van huid, mond en keel -Hik en maagklachten -Dromen, slapeloosheid	Nausea Hoofdpijn Slaapstoornissen Huidreacties Ontwenning bij plots stoppen	-Droge mond -Slapeloosheid -Hoofdpijn, Duizeligheid -Trillen -Zweten -Maag en darmklachten -Smaak stoornissen -Angst of depressie -Concentratie verlies
Contra-indicaties	-Instabiele angina pectoris -Ernstige aritmieën -Recent CVA	Ernstige nierfunctiestoornissen (creatinineklaring < 30 ml/min) < 18 j Zwangerschap	-Epilepsie of een eetstoornis; hersentumor, een bipolaire stoornis; -Ernstige nier en leverfunctiestoornis -Recent gestopt met alcohol of het innemen van sedativa; Behandeling met type MAO-remmers. -< 18 j -zwangerschap

	NRT	Varenicline	Bupropion
Prijs	€ 7,10 (36 kauwgommen) € 61,26 (21 pleisters) ± € 300€ voor 12 w	€ 246,99/12w	€ 128,14/9 w
Terugbetaling	De Stichting tegen Kanker biedt via "tabakstop" een financiële tussenkomst voor 6 w NRT aan. (verhoogde verzekeringstegemoetkoming)	2x per patiënt Remgeld: € 64,45	1x / gedurende het leven, enkel COPD patiënten Remgeld: € 56,70

EFFECTS MEDICATION AND BEHAVIOUR SUPPORT



WAT IS EEN TABAKOLOOG?

Een tabakoloog is een dokter (huisarts of specialist), een andere professionele gezondheidswerker (verpleegkundige, kinesist, vroedvrouw enz.) of een psycholoog die een aanvullende interuniversitaire opleiding tabakologie heeft gevolgd.

WAT DOET EEN TABAKOLOOG?

- Rookprofiel
- Beoordeling van verslaving op lichamelijk, psychologisch en op gedragsmatig vlak.
- Meten en evalueren van rookstatus
- Beoordeling van motivatie en zelfvertrouwen
- Bespreking van de rookstophulpmiddelen
- Strategie opstellen om te stoppen
- Motivationale gesprekstechnieken
- Cognitieve en gedragstherapie
- Coaching
- Herval en valkuilen bespreken
- Follow up



SINDS 01/01/2017 VERANDERDE HET

TERUGBETALINGSSYSTEEM VOOR ROOKSTOPBEGELEIDING IN

VLAANDEREN.

	INDIVIDUELE BEGELEIDING PER KWARTIER MAX.4UUR PER KALENDERJAAR	GROEPSBEGELEIDING PER KWARTIER MAX.12 UUR PER KALENDERJAAR
VERHOOGDE TEGEMOETKOMING * EN JONGER DAN 20 J	Max. 1 euro	Max. 0.5 euro
ZONDER VERHOOGDE TEGEMOETKOMING	Max. 7.5 euro	Max. 1 euro



<https://rookstop.vrgt.be/geregistreerde-tabakologen>

Geregistreerde tabakologen

Naam

Naam onderneming

Postcode

Provincie

- Antwerpen
- Oost-Vlaanderen
- West-Vlaanderen
- Vlaams-Brabant
- Limburg
- Brussel
- Andere regio

Begeleiding

- Individuele begeleiding
- Groepsbegeleiding

Indien je de voorkeur geeft aan een begeleiding in groep dan kun je op zoek gaan naar een groeps cursus rookstop.

Wanneer je kiest voor een telefonische begeleiding neem dan contact op met Tabakstop op 08001100.

De begeleiding door een geregistreerde tabakoloog wordt gedeeltelijk terugbetaald.



Appelen Lien

DAMPEN-VAPEN: E-SIGARET

1. Incidentie
2. Evolutie
3. Effect als rookstophulpmiddel

BELGIË

14% ooit een e-sig gebruikt (2015: 10%)(EU: 15%)

17% bij de 18-34 j (EU: 21%)

34% om te stoppen; 25% om minder te roken (EU: 61%)

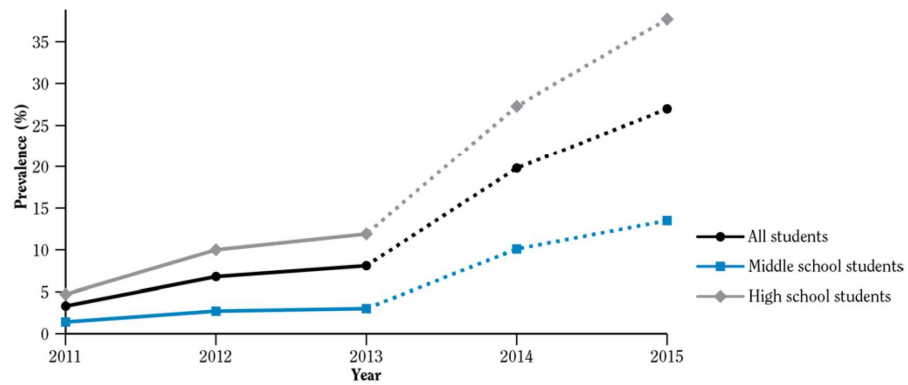
3% dagelijks (EU: 2%)

60% dual users en vnl gebruik van e-sig met nicotine (EU: 86%)



European Commission, Special Eurobarometer 458, 2017
Stichting tegen kanker, 2017

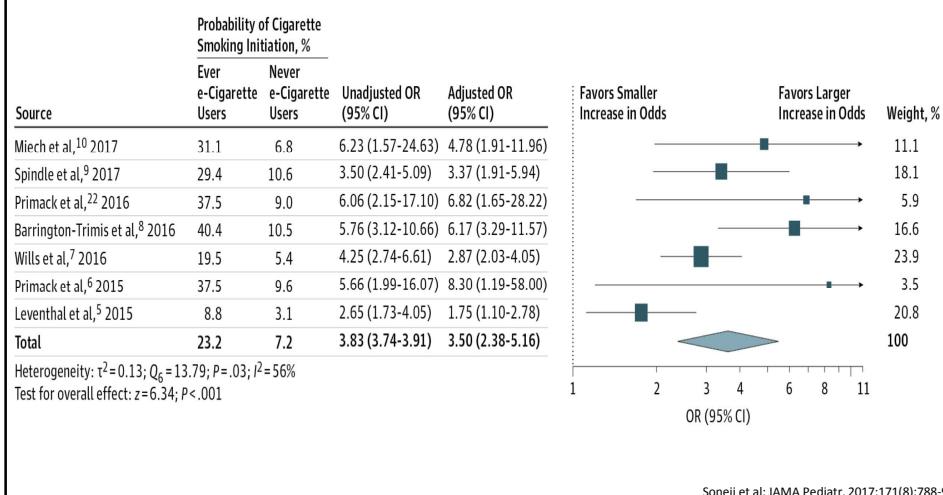
TRENDS IN EVER E-CIGARETTE USE AMONG US STUDENTS



Gateway drug ???

Report of the Surgeon General, 2016

ASSOCIATION BETWEEN INITIAL USE OF E-CIGARETTES AND SUBSEQUENT CIGARETTE SMOKING AMONG ADOLESCENTS AND YOUNG ADULTS



E-CIGARETTE

Battery-powered heating a solution (vapor) typically made up of propylene glycol or glycerin, nicotine and flavoring agents.



1st Generation
"Cig-a-like"



2nd Generation
"Vape-pen"



3rd Generation
"Box mod"



4th Generation
"Temperature Control (TC)
Box mod"

Clapp et al, Curr Allergy Asthma Rep, 2017; 17:79

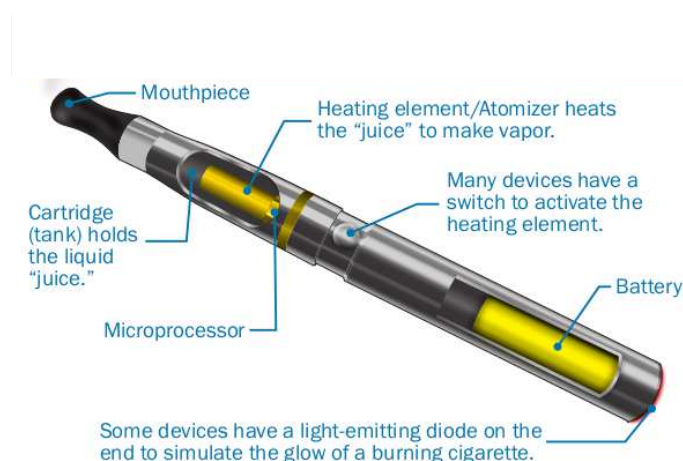
E-LIQUID

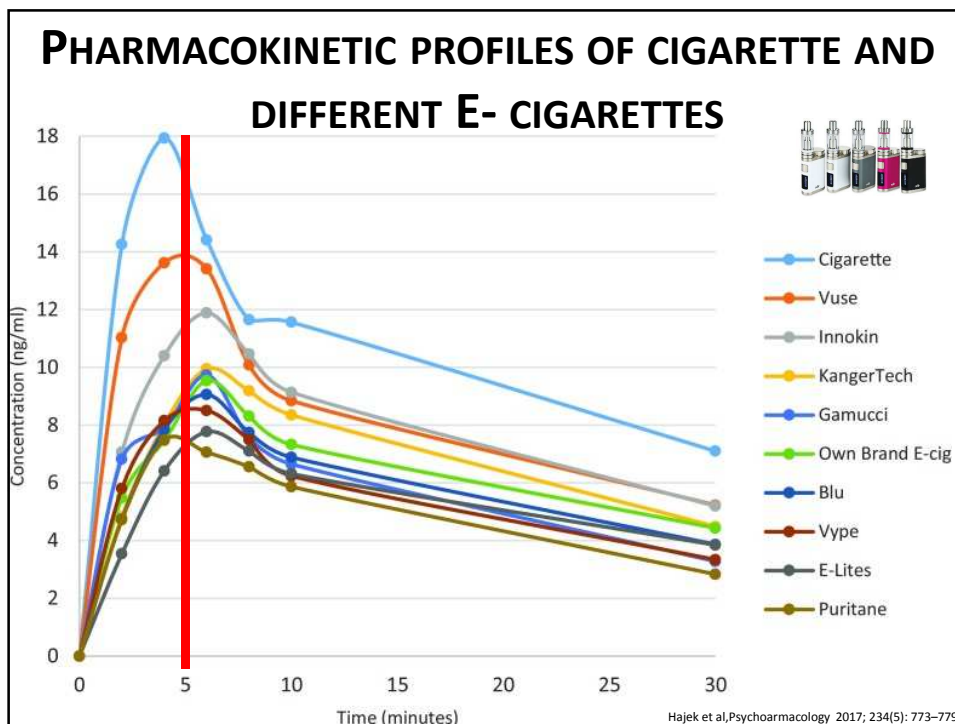
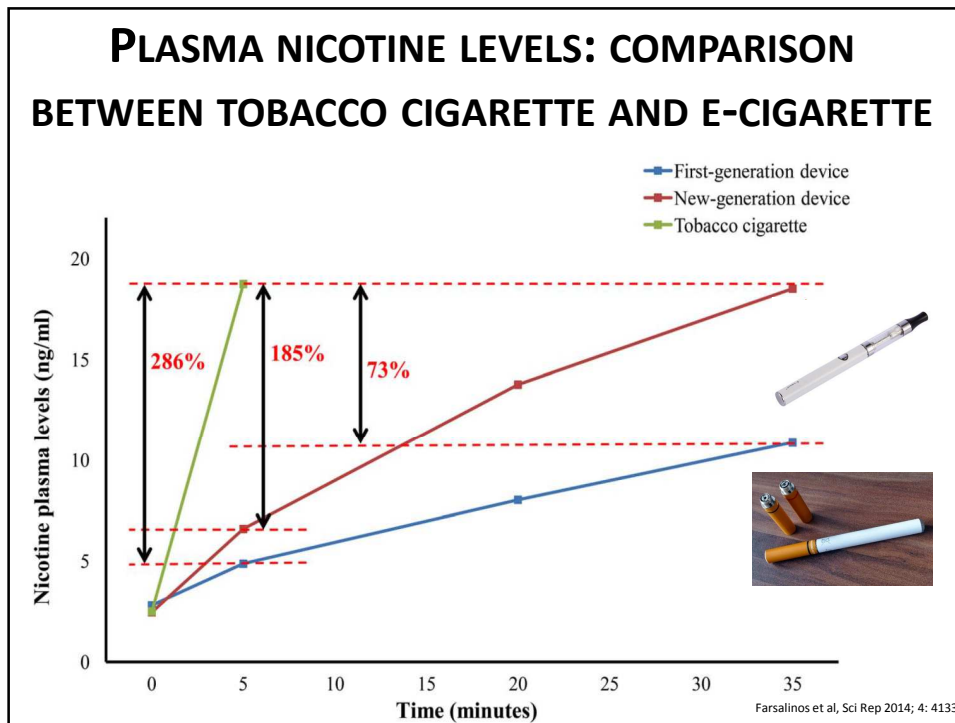


- E-vloeistof, E-liquid en soms ook E-juice genoemd
- Bevat water, aroma's, propyleenglycol (PG) en/of plantaardige glycerine (VG) en meestal nicotine
- Sensoriele stimulatie via e-sig: throat hit of zoete smaak
- Aroma's of smaakstoffen zijn veilig indien gebruik in voeding
- Verschillende nicotinegehaltenes: 0 - 36 mg



MECHANISM





JUUL

Podmod → “I-phone van de e-sigaretten”



Vooral jongeren doen aan JUULING: 12% van 17% in VS

JUULpod: reservoir van 0,7 ml nicotine vloeistof → 200 puffs

Nicotine salts= JUULsalts

op basis van benzoëzuur en nicotinezouten
afkomstig uit tabaksblad

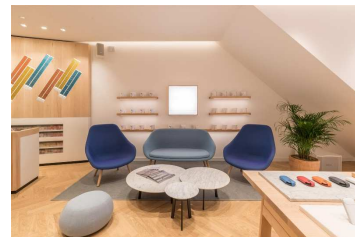
5% nicotine = 59 mg/ml = nic conc van 20 sig.

Nicotine wordt sneller en met hogere concentratie opgenomen dan
tov een traditione e-cig en is zachter om te inhaleren

Starterspakket 50 € : JUUL, oplader en 4 pods, 16 € voor 4 pods

IQOS

- Nieuwe elektronische sigaret van Philip Morris
- Heat not to burn
- Een hybride tussen een E-sigaret en een conventionele sigaret
- “Cold smoke” met 350°C → getoomde tabaksdamp inademen
- Evenveel en evensnel nicotine opname
- 6 min gebruik → 14 a 16 puffs
- 70 € en 6 € per 20 heet sticks



Tabuchi et al, 2017, Tob. Control, 0; 1-9 Xiaoqiu Liu, et al, 2018; J Epidemiol


E-Cigarette Liquid Ingredients VS Traditional Cigarette Ingredients	
<p>Propylene Glycol Vegetable Glycerin Nicotine Concentrate Artificial Flavoring</p>	<p>4000+ Known Carcinogens Cyanhydric Acid Dibenzacridine Vinyl Chloride Nicotine Cadmium Urethane Acetone Ammoniac Toluene Polonium 210 DDT Naphthalene Pyrene Methanol Carbon Monoxide</p>
<ul style="list-style-type: none"> Propylene Glycol has undergone extensive testing and is widely used in a variety of consumer products, including food. It is also approved by US FDA for a variety of pharmaceutical formulations. Vegetable Glycerin is a plant-based carbohydrate. Its safety is pretty much unchallenged and studies demonstrate that it is non-carcinogenic. Likewise, both PG and VG are widely used in many industries, including pharmaceutical, cosmetic and food. Tobacco smoke contains 4000+ chemicals and compounds - at least 69 of these are cancer-causing. 	

Table 1. Constituents of Liquids and Aerosols in E-Cigarettes.
Liquids ³⁰⁻³²
Listed ingredients
Glycerol
Propylene glycol
Nicotine
Other compounds detected
Acetone
Acrolein
1,3-Butadiene
Cyclohexane
Diethylene glycol
Ethylene glycol
Ethanol
Formaldehyde
Tobacco alkaloids (nicotine, myosmine, and anabasine have been detected in some products, although tobacco was not listed as an ingredient)
Aerosols ³³⁻³⁷
Listed ingredients
Glycerol
Propylene glycol
Nicotine
Other compounds detected
Acetaldehyde
Acetone
Acrolein
Formaldehyde
N'-nitrosornicotine (NNN)
4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK)
Metals (cadmium, lead, nickel, tin, copper)
Toluene

Dinakar C et al, N Engl J Med 2016; 375:1372-81

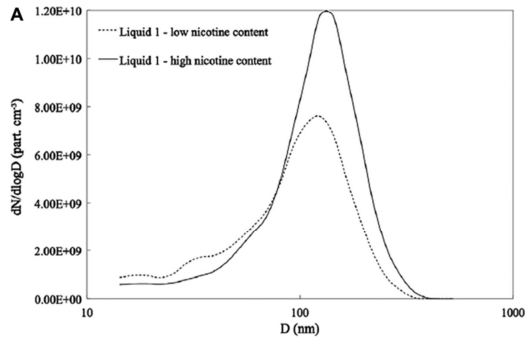
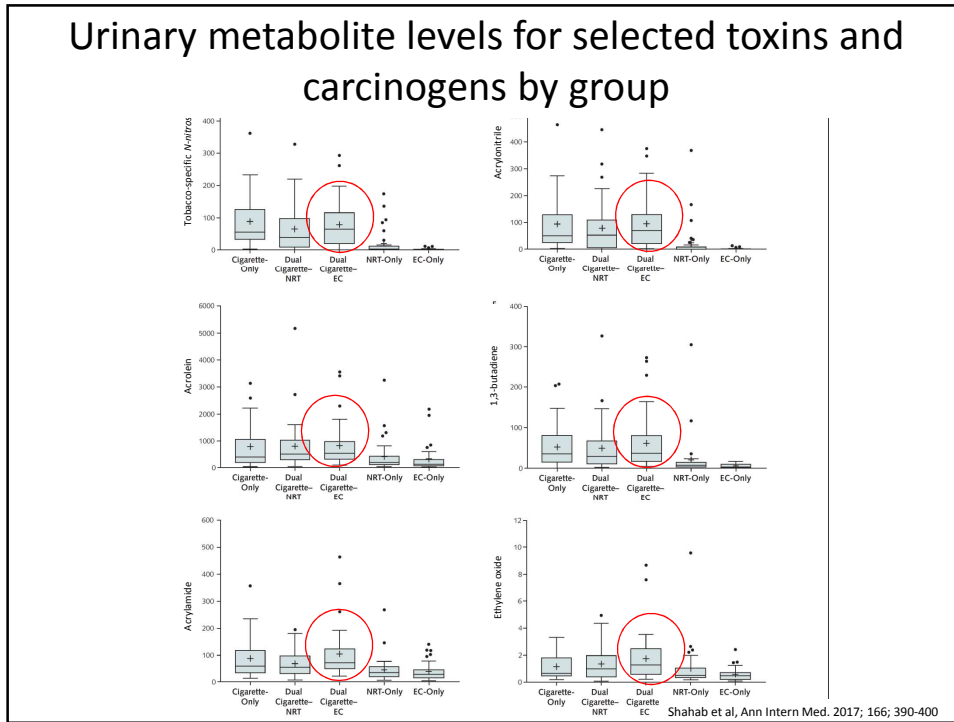
Table 1. Levels of Toxicants in E-Cigarette Aerosol Compared With Nicotine Inhaler and Cigarette Smoke			
Toxicant	Range in Content in Aerosol From 12 E-Cigarette Samples per 15 Puffs*	Range in Content in Conventional Cigarette Micrograms in Mainstream Smoke From 1 Cigarette	Content in Nicotine Inhaler Mist per 15 Puffs*
Formaldehyde, µg	0.2–5.61	1.6–52	0.2
Acetaldehyde, µg	0.11–1.36	52–140	0.11
Acrolein, µg	0.07–4.19	2.4–62	ND
o-Methylbenzaldehyde, µg	0.13–0.71	...	0.07
Toluene, µg	ND–0.63	8.3–70	ND
p,m-xylene, µg	ND–0.2	...	ND
NNN, ng	ND–0.00043	0.0005–0.19	ND
NNK, ng	ND–0.00283	0.012–0.11	ND
Cadmium, ng	ND–0.022	...	0.003
Nickel, ng	0.011–0.029	...	0.019
Lead, ng	0.003–0.057	...	0.004

Prepared using data from Goniewicz et al.⁴¹ E-cigarette indicates electronic cigarette; and ND, not determined.

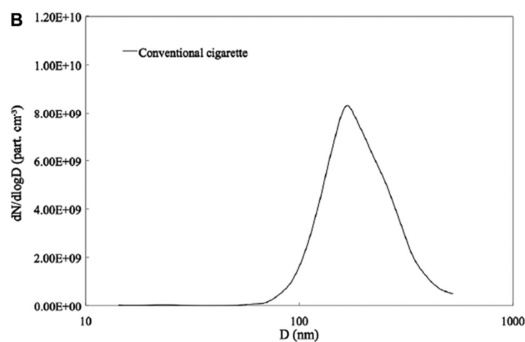


Rachel Grana et al. Circulation. 2014;129:1972-1986

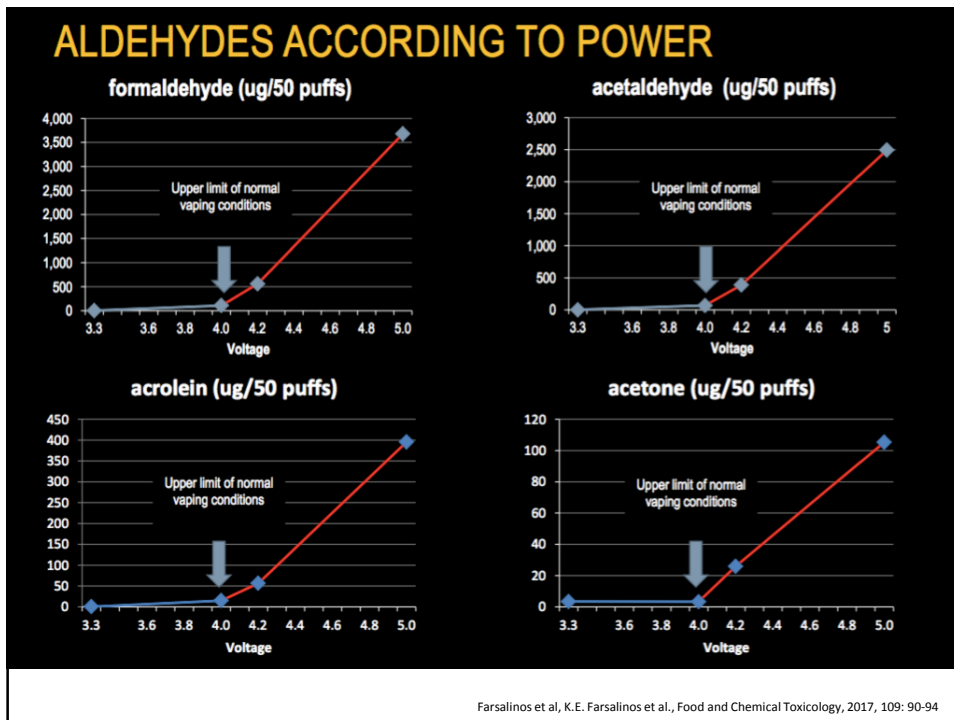
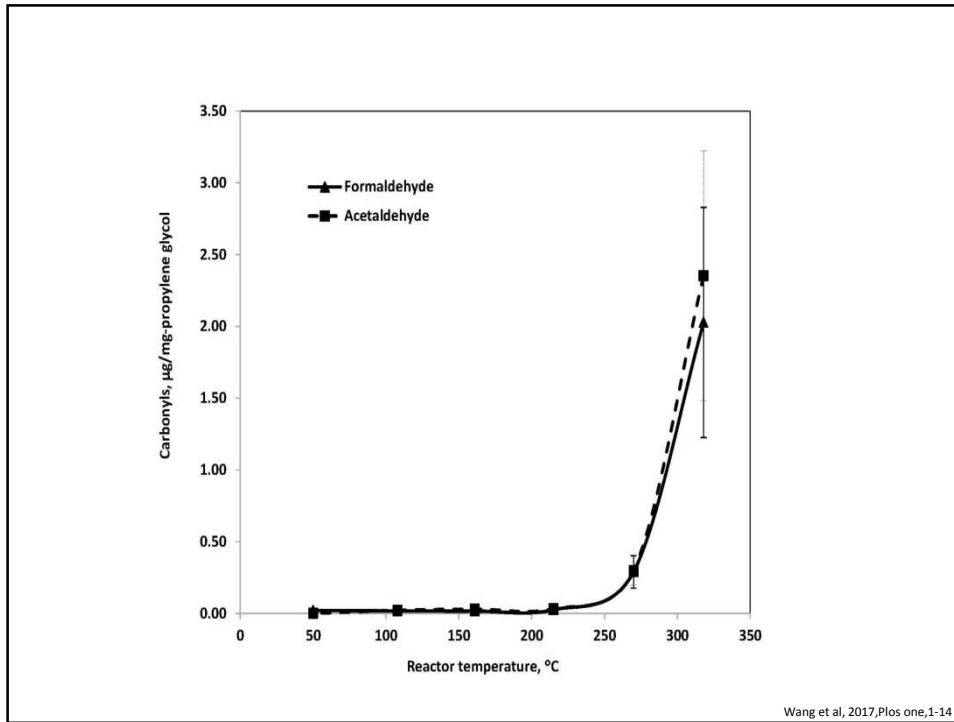
Urinary metabolite levels for selected toxins and carcinogens by group



Particle size distribution was similar to that of conventional cigarettes. ($\approx 120\text{--}165\text{ nm}$)

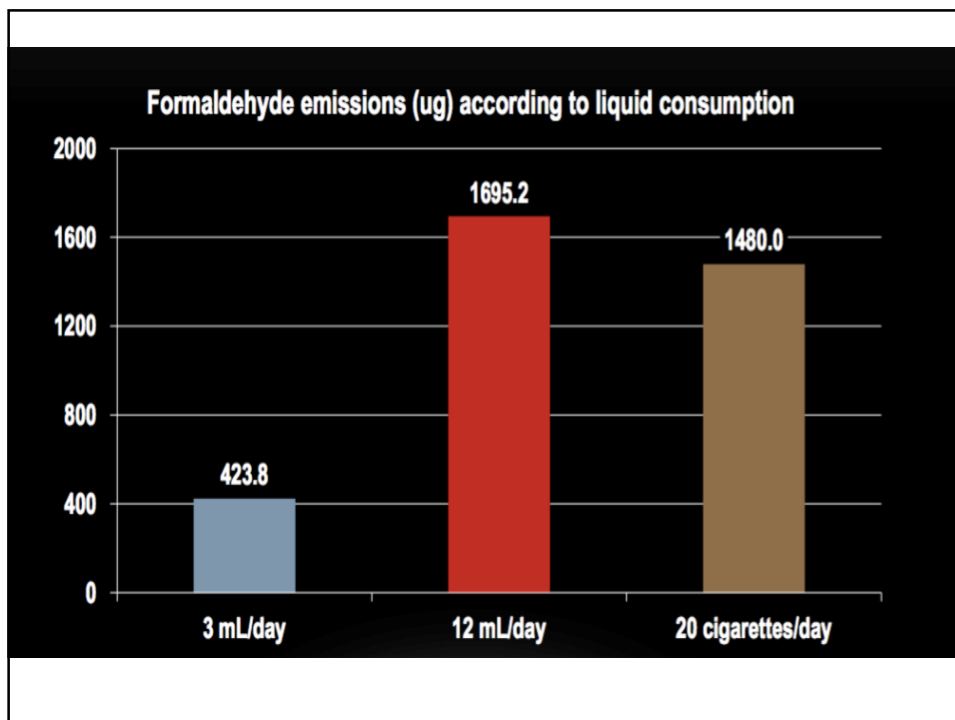


Rachel Grana et al. Circulation. 2014;129:1972-1986



		DAMP TABEL - Vermogen (Power) in Watt [P=U ² /R]																				
		Spanning in Volt																				
		3,00	3,20	3,40	3,70	4,00	4,20	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00	7,25	7,50	7,75	8,00
Weerstand in Ohm	1,20	7,50	8,53	9,63	11,41	13,33	14,70	16,88	18,80	20,83	22,97	25,21	27,55	30,00	32,55	35,21	37,97	40,83	43,80	46,88	50,00	53,21
	1,30	6,92	7,88	8,89	10,53	12,31	13,57	15,58	17,36	19,23	21,20	23,27	25,43	27,69	30,05	32,50	35,05	37,69	40,43	43,27	46,20	49,23
	1,50	6,00	6,83	7,71	9,13	10,67	11,76	13,50	15,04	16,67	18,38	20,17	22,04	24,00	26,04	28,17	30,38	32,67	35,04	37,50	40,04	42,67
	1,80	5,00	5,69	6,42	7,61	8,89	9,80	11,25	12,53	13,89	15,31	16,81	18,37	20,00	21,70	23,47	25,31	27,22	29,20	31,25	33,37	35,55
	2,00	4,50	5,12	5,78	6,85	8,00	8,82	10,13	11,28	12,50	13,78	15,13	16,53	18,00	19,53	21,13	22,78	24,50	26,28	28,13	30,03	32,00
	2,20	4,09	4,65	5,25	6,22	7,27	8,02	9,20	10,26	11,36	12,53	13,75	15,03	16,36	17,76	19,20	20,73	22,27	23,89	25,57	27,30	29,09
	2,40	3,75	4,27	4,82	5,70	6,67	7,35	8,44	9,40	10,42	11,48	12,60	13,78	15,00	16,28	17,60	18,98	20,42	21,90	23,44	25,03	26,67
	2,80	3,21	3,66	4,13	4,89	5,71	6,30	7,23	8,06	8,93	9,84	10,80	11,81	12,86	13,95	15,09	16,27	17,50	18,77	20,09	21,45	22,85
	3,00	3,00	3,41	3,85	4,56	5,33	5,88	6,75	7,52	8,33	9,19	10,08	11,02	12,00	13,02	14,08	15,19	16,33	17,52	18,75	20,02	21,33
	3,20	2,81	3,20	3,61	4,28	5,00	5,51	6,33	7,05	7,81	8,61	9,45	10,33	11,25	12,21	13,20	14,24	15,31	16,43	17,58	18,77	20,00
	3,50	2,57	2,93	3,30	3,91	4,57	5,04	5,79	6,45	7,14	7,86	8,64	9,45	10,29	11,16	12,07	13,02	14,00	15,02	16,07	17,16	18,29
	4,00	2,25	2,56	2,89	3,42	4,00	4,41	5,06	5,64	6,25	6,89	7,56	8,27	9,00	9,77	10,56	11,39	12,25	13,14	14,06	15,02	16,00
4,50	2,00	2,28	2,57	3,04	3,56	3,92	4,50	5,01	5,56	6,13	6,72	7,35	8,00	8,68	9,39	10,13	10,89	11,68	12,50	13,35	14,22	
5,00	1,80	2,05	2,31	2,74	3,20	3,53	4,05	4,51	5,00	5,51	6,05	6,61	7,20	7,81	8,45	9,11	9,80	10,51	11,25	12,01	12,80	
5,50	1,64	1,86	2,10	2,49	2,91	3,21	3,68	4,10	4,55	5,01	5,50	6,01	6,55	7,10	7,68	8,28	8,91	9,56	10,23	10,92	11,64	
6,00	1,50	1,71	1,93	2,28	2,67	2,94	3,38	3,76	4,17	4,59	5,04	5,51	6,00	6,51	7,04	7,59	8,17	8,76	9,38	10,01	10,67	
6,50	1,38	1,58	1,78	2,11	2,46	2,71	3,12	3,47	3,85	4,24	4,65	5,09	5,54	6,01	6,50	7,01	7,54	8,09	8,65	9,24	9,85	

 Te koud; dit is geen bruikbare instelling	 iets te warm; sommige liquids gaan raar smaken
 Koud; weinig smaak en weinig damp	 Heet; verbrande smaak en risico op defecte coil
 Koel; matige smaak en dampproductie	 Te heet; coil burnout is vrijwel zeker
 Precies goed voor de meeste liquids (en gebruikers)	



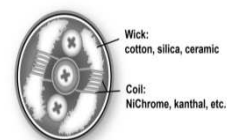
EXPLOSION INJURIES FROM E-CIGARETTES



Brownsons et al, N Engl J Med 375;14 nejm.org October 6, 2016

E-SIG KUNNEN VERSCHILLEND ZIJN OP:

- Atomizer: prebuilt, RTA, RDA
- Weerstand: variëren ts 1,2 en 3 Ohm of <1,0 Ohm als standard, dual, quad coil
- Gloeidraadmateriaal: kanthal, nikkel, titanium, roestvrij staal, koper, zilver, zink en tin
- Lont: Silica, Katoen, bamboe
- Verschillende e liquids : smaakstoffen en met Nicotine (conc) /zonder
- Verhouding PG/VG
- Voltage/Wattage/ T°
- MTL/DL



Chun et al, Am L Physiol Lung Cell MolPhysiol, 2017; 313:L193-206

EFFECTS OF E-CIGARETTE FOR SMOKING CESSATION

ECLAT trial

Caponnetto P¹, Campagna D, Cibella F, Morjaria JB, Caruso M, Russo C, Polosa R. **EffiCienCy and Safety of an eLectronic cigAreTte (ECLAT) as tobacco cigarettes substitute: a prospective 12-month randomized control design study.** PLoS One. 2013 Jun 24;8(6): e66317

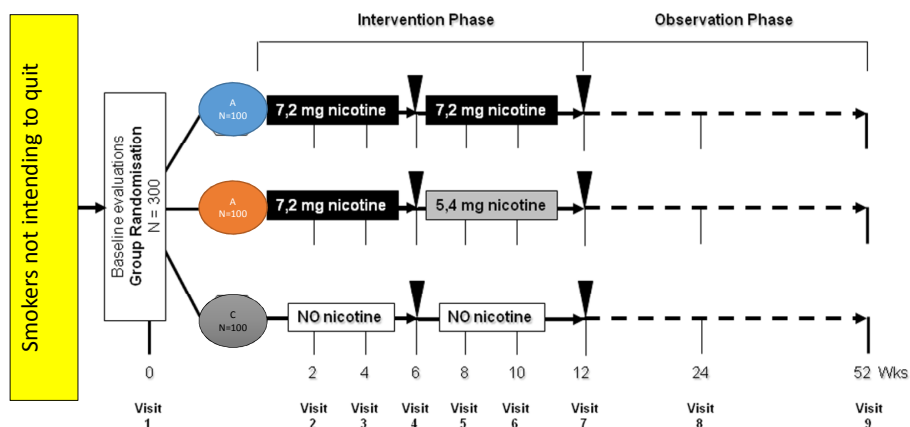
ASCEND trial

Bullen C, Howe C, Laugesen M, McRobbie H, Parag V, Williman J, Walker N. **Electronic cigarettes for smoking cessation: a randomised controlled trial.** Lancet. 2013

EffiCienCy and Safety of an eLectronic cigAreTte (ECLAT) as Tobacco Cigarettes Substitute: A Prospective 12-Month Randomized Control Design Study

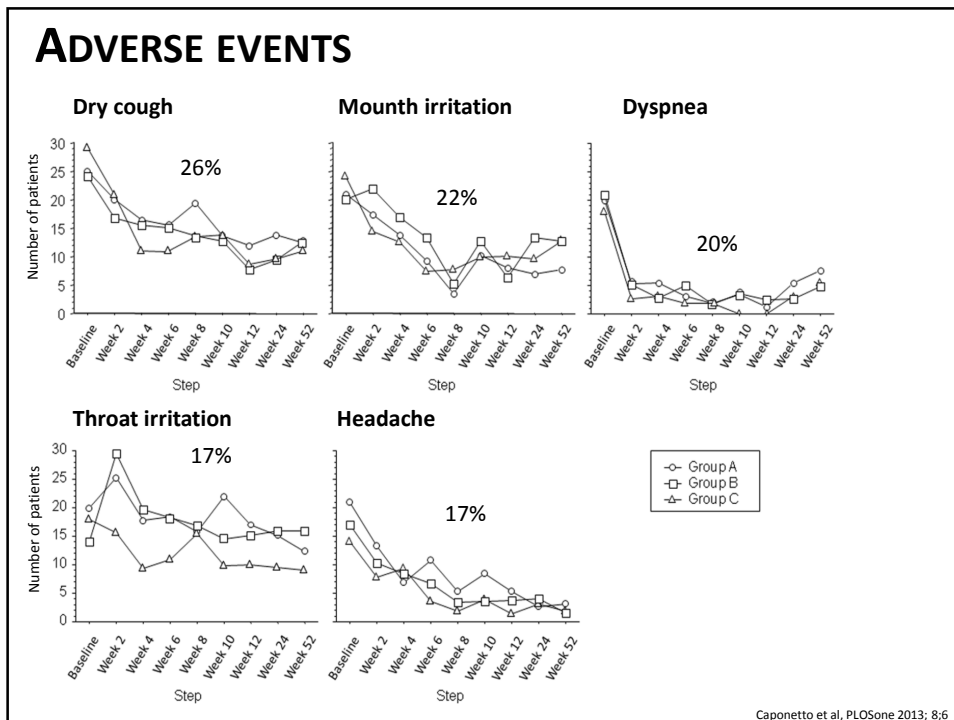
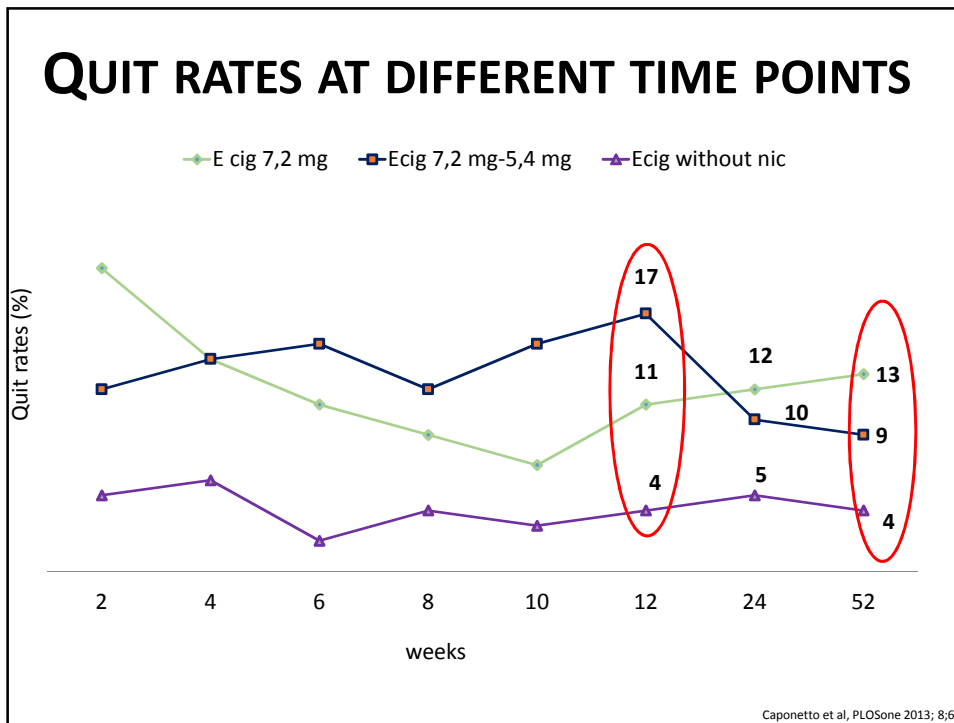


Pasquale Caponnetto^{1,2}, Davide Campagna^{1,2}, Fabio Cibella³, Jaymin B. Morjaria⁴, Massimo Caruso², Cristina Russo^{1,2}, Riccardo Polosa^{1,2*}



No counseling, 9 visits
Abstinence: CO ≤ 7ppm

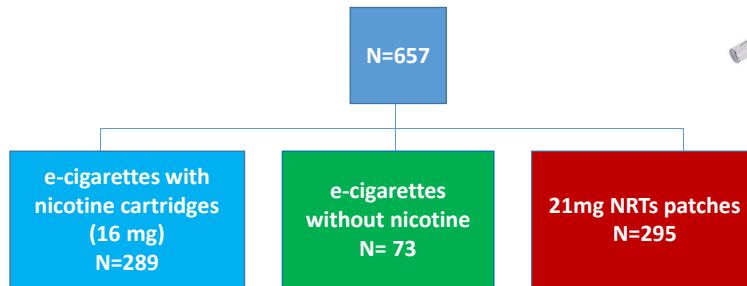
Caponnetto et al, PLoSone 2013; 8;6



Electronic cigarettes for smoking cessation: a randomised controlled trial



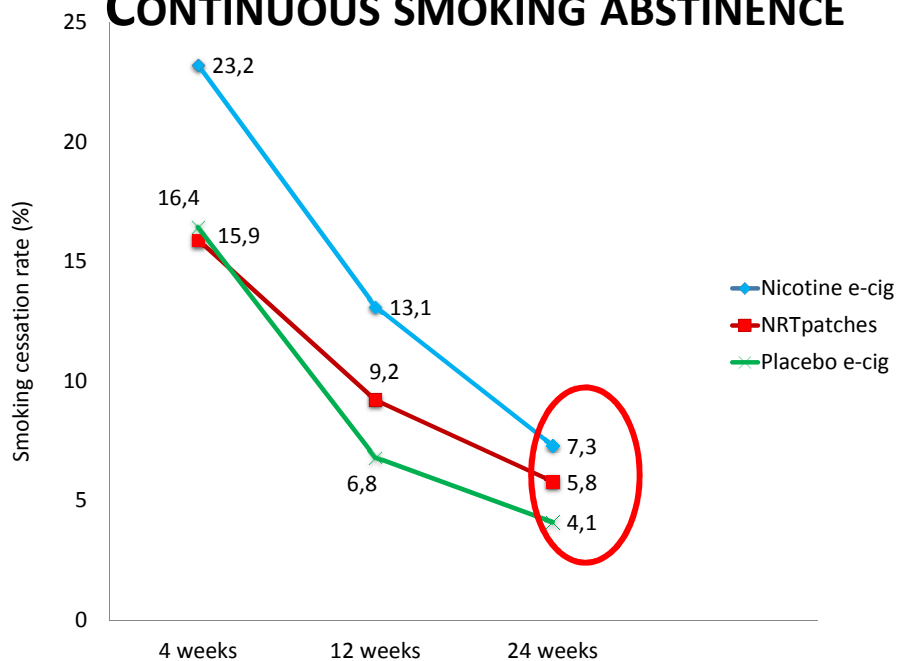
Christopher Bullen, Colin Howe, Murray Laugesen, Hayden McRobbie, Varsha Parag, Jonathan Williman, Natalie Walker



- from 1 week before until 12 weeks after quit day
- E-cig were couriered vs NRT patches from community pharmacies
- low support via voluntary telephone counseling
- CAR 6 months CO < 10 ppm

Bullen et al, Lancet, 2013;382:1629-37

CONTINUOUS SMOKING ABSTINENCE



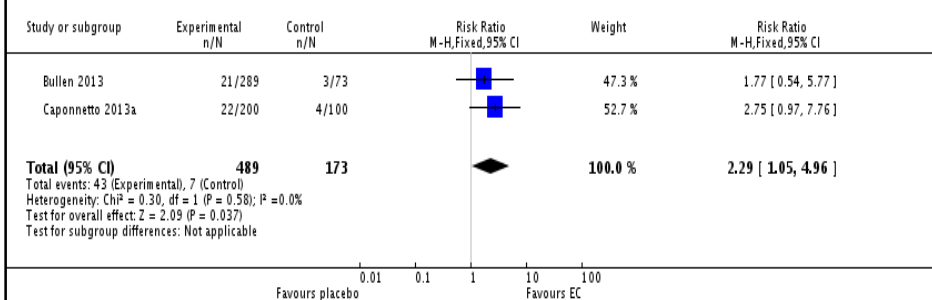
Bullen et al, Lancet, 2013;382:1629-37

ADVERSE EVENTS

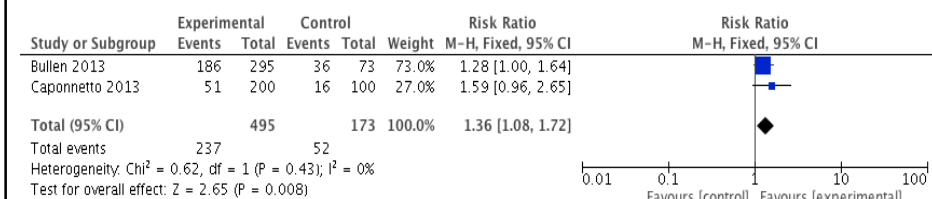
	Nicotine e-cigarettes		Patches		Placebo e-cigarettes	
	N	%	N	%	N	%
Total	137	100%	119	100%	36	100%
Event type						
Serious*	27	19.7%	14	11.8%	5	13.9%
Any non-serious event	110	80.3%	105	88.2%	31	86.1%

Bullen et al, Lancet, 2013;382:1629-37

E-CIGARETTES FOR SMOKING CESSATION



E-CIGARETTES FOR SMOKING REDUCTION




Boyle et al, Cochrane Database of Systematic Reviews, 2014

American Journal of
Preventive Medicine

RESEARCH ARTICLE

**E-cigarettes Associated With Depressed Smoking
Cessation: A Cross-sectional Study of 28 European
Union Countries**

Margarete C. Kulik, PhD, Nadra E. Lisha, PhD, Stanton A. Glantz, PhD



Conclusions: These results suggest that e-cigarettes are associated with inhibiting rather than assisting in smoking cessation. On the population level, the net effect of the entry of e-cigarettes into the European Union (and Great Britain) is associated with depressed smoking cessation of conventional cigarettes.

Kulik et al, Am J Prev Med, 2018; 54,4, 603-9

TAKE HOME MESSAGES (1)

- GPs have an important role in the identification and evaluation of the smoking status and in giving a brief smoking cessation advice.
- The combination of intensive counseling and smoking cessation pharmacotherapy gives the highest smoking cessation quit rate
- Combination NRTs are even efficient as Varenicline.

TAKE HOME MESSAGES (2)

- E-cigarette use increases risk of ever using combustible tobacco cigarettes among youth and young adults.
- E-cigarette use is not safe!
- The efficacy of E-cigarette as smoking-cessation tool is graded LOW.
- Usage of e-cigarette may discourage smokers from quitting.

TAKE HOME MESSAGES (3)

Send patient to smoking cessation consultant



ASK Do you use tobacco products?

Include use of e-cigs in assessment



ADVISE to quit.

For those currently using e-cigs, evaluate patterns and duration of use, potential AE, and understanding of risks vs. benefits.



ASSESS willingness to quit.

Explore willingness to use alternative cessation aids (e.g. NRT, bupropion, varenicline)



ASSIST in quit attempt.

Switch to FDA-approved cessation aids if willing. If continued use of e-cigs, explain risks vs. benefits.



ARRANGE for follow-up.

Establish quit date. Monitor patterns of use, AE, continued use of traditional tobacco products. Ensure use of e-cigs for shortest duration possible.

Franks et al. 2018, Pharmacotherapy;38(5):555-568; Fiore et al. JAMA 2008;299:2083-5