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Rethinking nicotine across the lifespan: What about the older smoker?

Annie Kleykamp, PhD
Scientist, PinneyAssociates

www.PinneyAssociates.com



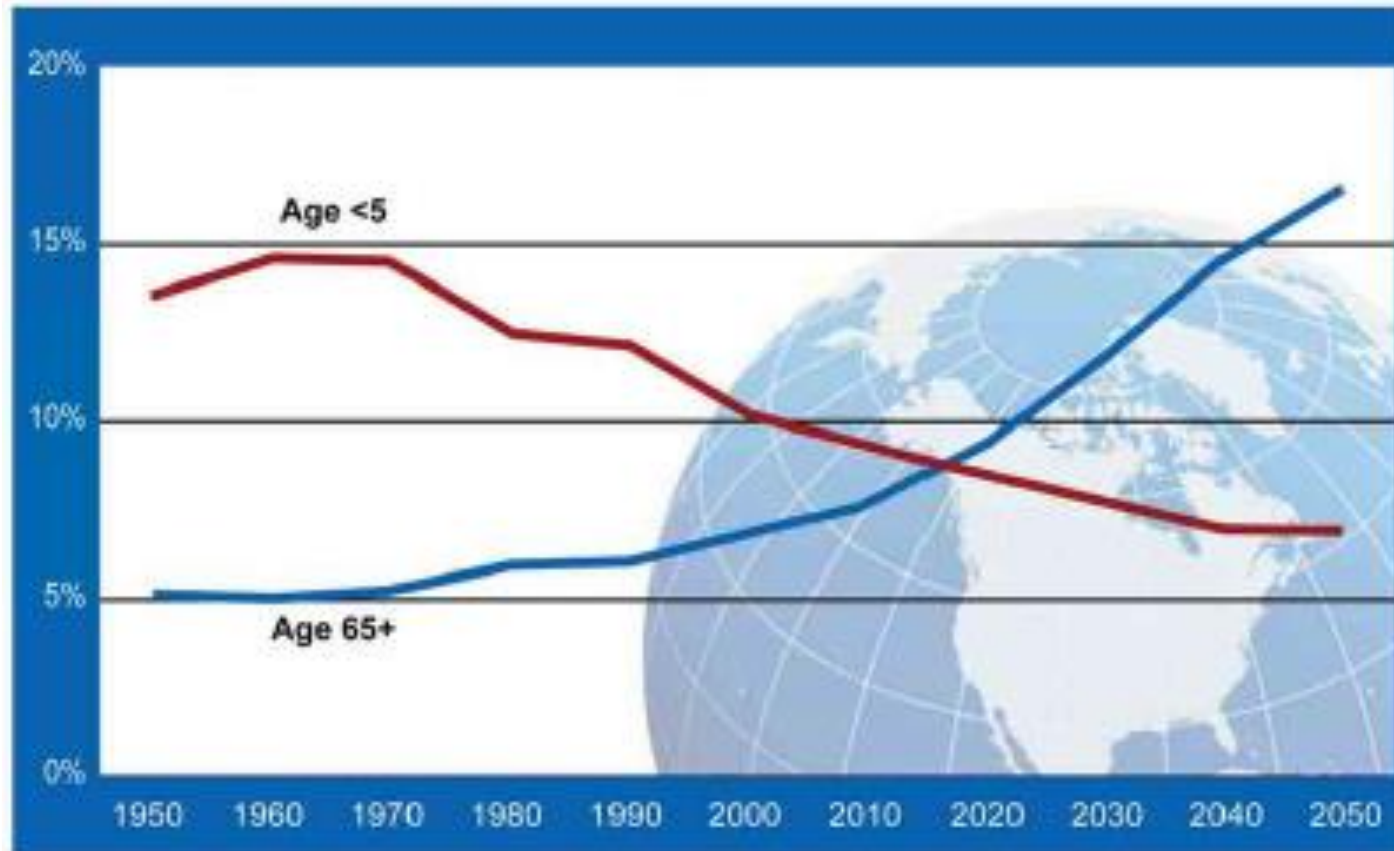
Disclosures

- PinneyAssociates (PA) provides consulting services on smoking cessation and tobacco harm minimization (including nicotine replacement therapy and electronic vapor products) to Nicovum USA, Inc., R.J. Reynolds Vapor Company, and RAI Services Company, all subsidiaries of Reynolds American Inc. RAI was acquired by British American Tobacco (BAT) in July 2017.
- PA does not consult on combustible tobacco products.
- RAI, nor any other PA client, reviewed or guided the preparation of this presentation.

Overview

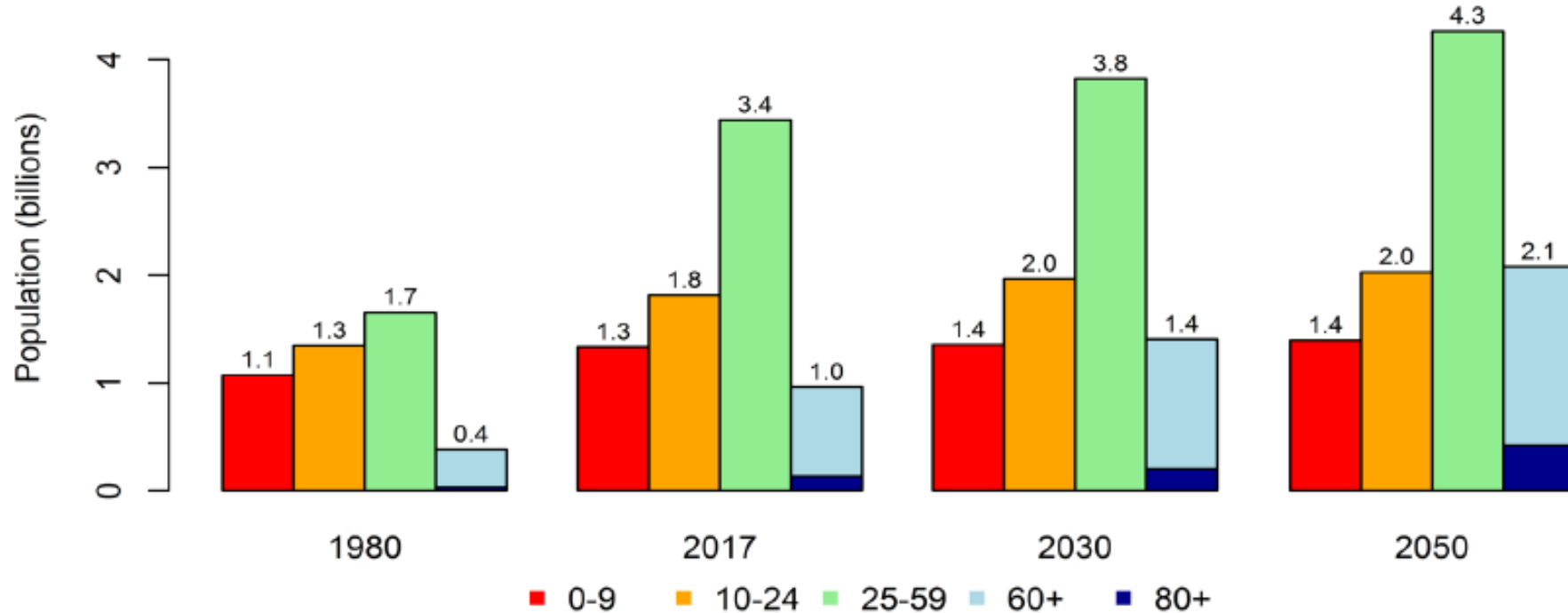
- Population aging
- Smoking prevalence
- Older smokers
- Harm reduction
- Future considerations

Global Population (%) by Age 1950-2050



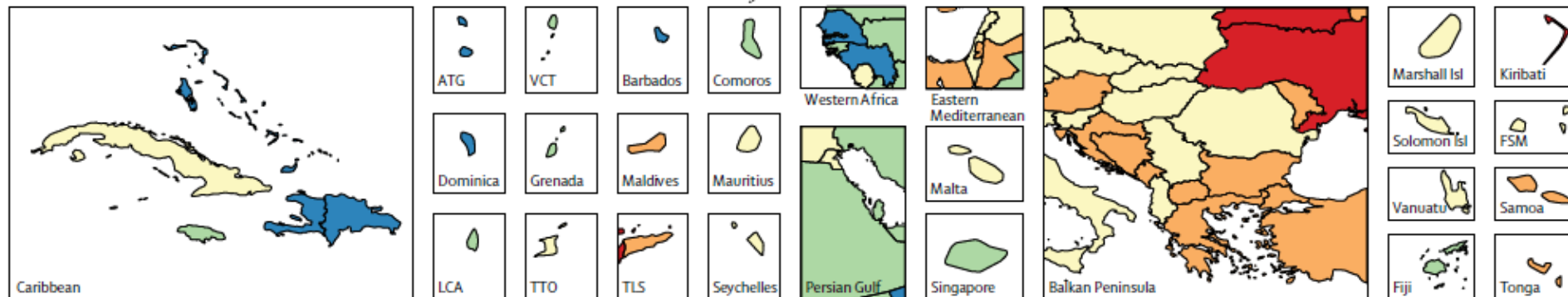
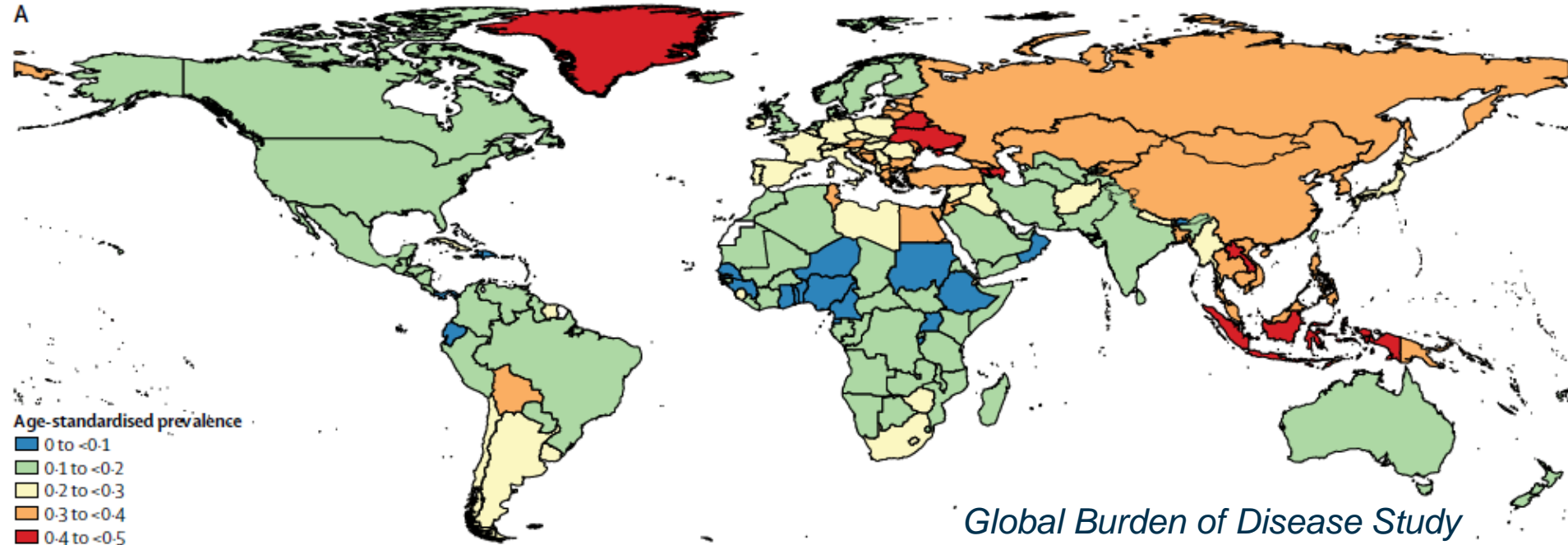
Source: United Nations. *World Population Prospects: The 2010 Revision*.
Available at: <http://esa.un.org/unpd/wpp>.

Global Population by Age Group 1980-2050

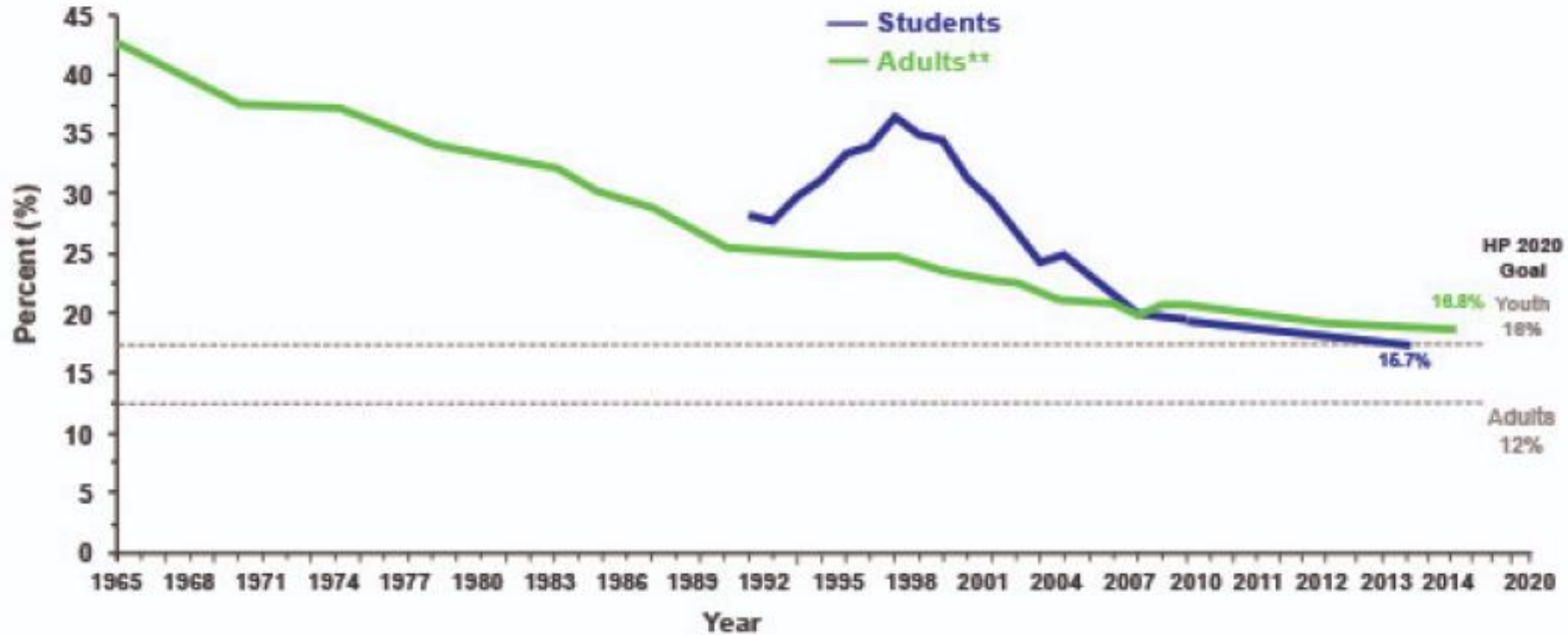


Data source: United Nations (2017). World Population Prospects: the 2017 Revision.

Daily Smoking Prevalence 2015

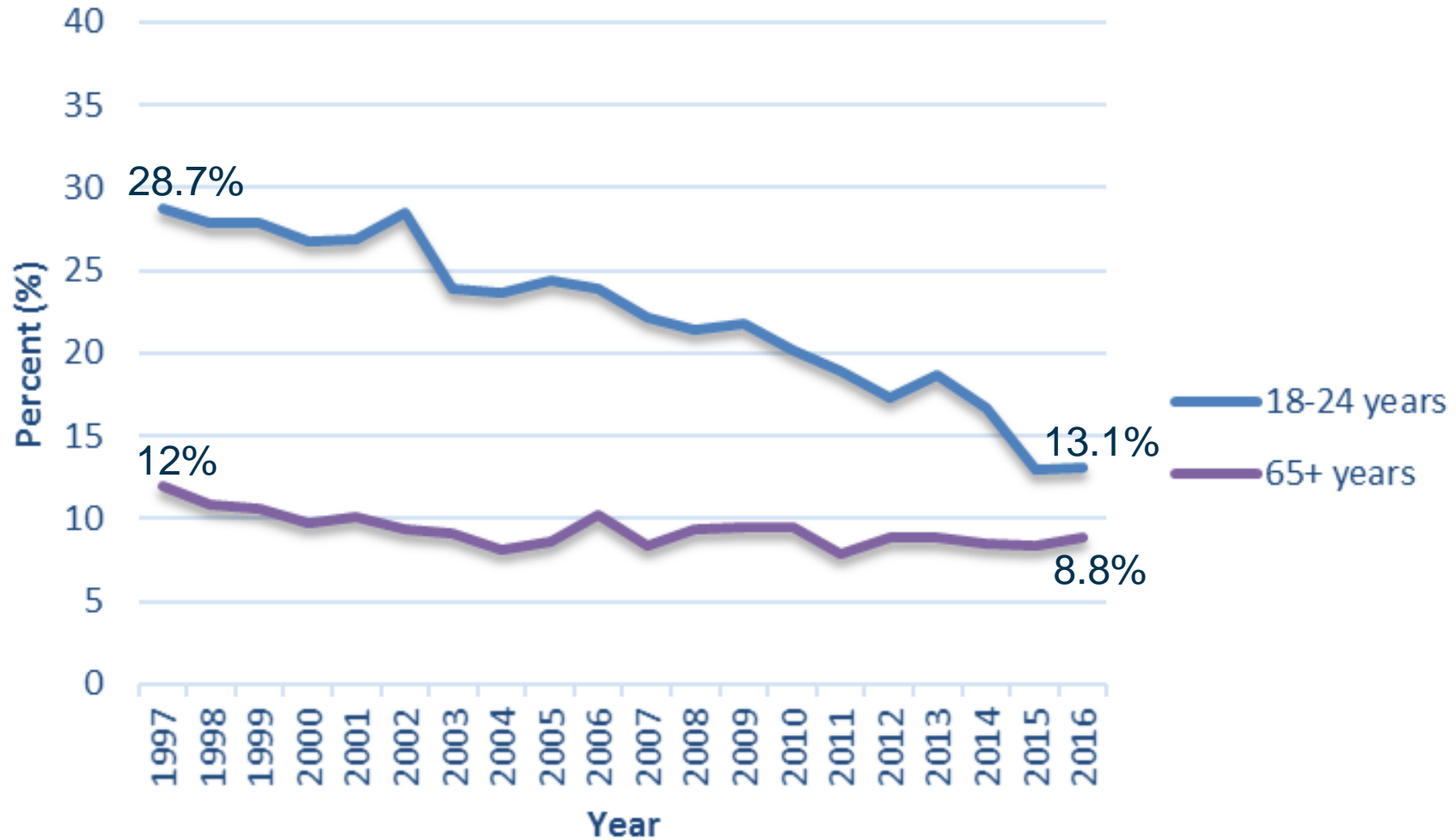


Current Cigarette Smoking – United States 1965-2014



https://www.cdc.gov/tobacco/data_statistics/tables/trends/cig_smoking/index.htm

Current Smokers (United States)



National Health Interview Data (CDC, MMWR)

If smoking prevalence remains the same, then the absolute number of older smokers will increase as the population increases.

What about the older smoker?

Authors	Range	Mean	Standard Deviation
Gilbert et al., 1998	18 - 46	28.1	6.3
Gilbert et al., 2002	18 - 55	25	7.43
Gritz et al., 1991	not reported	41.4	13.5
Gross & Stitzer, 1989	18-70	43.5	2.1
Hatsukami et al., 1988	over 18	25.8	8.1
Hatsukami et al., 1984	not reported	46.6	7.2
Hatsukami et al., 1991	not reported	43	9.2
Hillemann et al., 1992	27-51	38	8
Hughes, 1992	18 or older	38.7	11.9
Hughes et al., 1991	not reported	36.3	10.3
Hughes & Hatsukami, 1986	not reported	38	10
Jorenby et al., 1996	not reported	42	0.97
Robinson et al., 1992	18-65	42.9	9.6
Ward, Swan, 2001	21-65	41.9	not reported
West et al., 1991	21-65	36.3	not reported

**Age range
across studies:
25 to 46.6 years**

Hughes et al., 2007

What do we know about aging and smoking?

Pharmacology

Metabolism

Age-related changes in metabolism of nicotine (e.g., slower clearance; Molander et al., 2001; Yamamoto et al., 2015).

Drug interactions

Polypharmacy could impact the effects of smoking cessation treatments (Carlo & Alpert, 2015; Doolan & Froelicher, 2008).

Health Conditions

Cardiovascular disease

Former smokers similar to that of never-smokers after >15 years tobacco cessation (Ahmed et al., 2015).

Substance Abuse

Binge drinking, illicit drug use, and nonmedical prescription drug use were correlated with smoking into old age (Blazer & Wu, 2012).

Hospitalization

Duration of stay

Smokers more likely to require postoperative ICU care (Møller et al., 2001)

Wound healing

Complicated by smoking (Reuther & Brennan, 2014).

Withdrawal

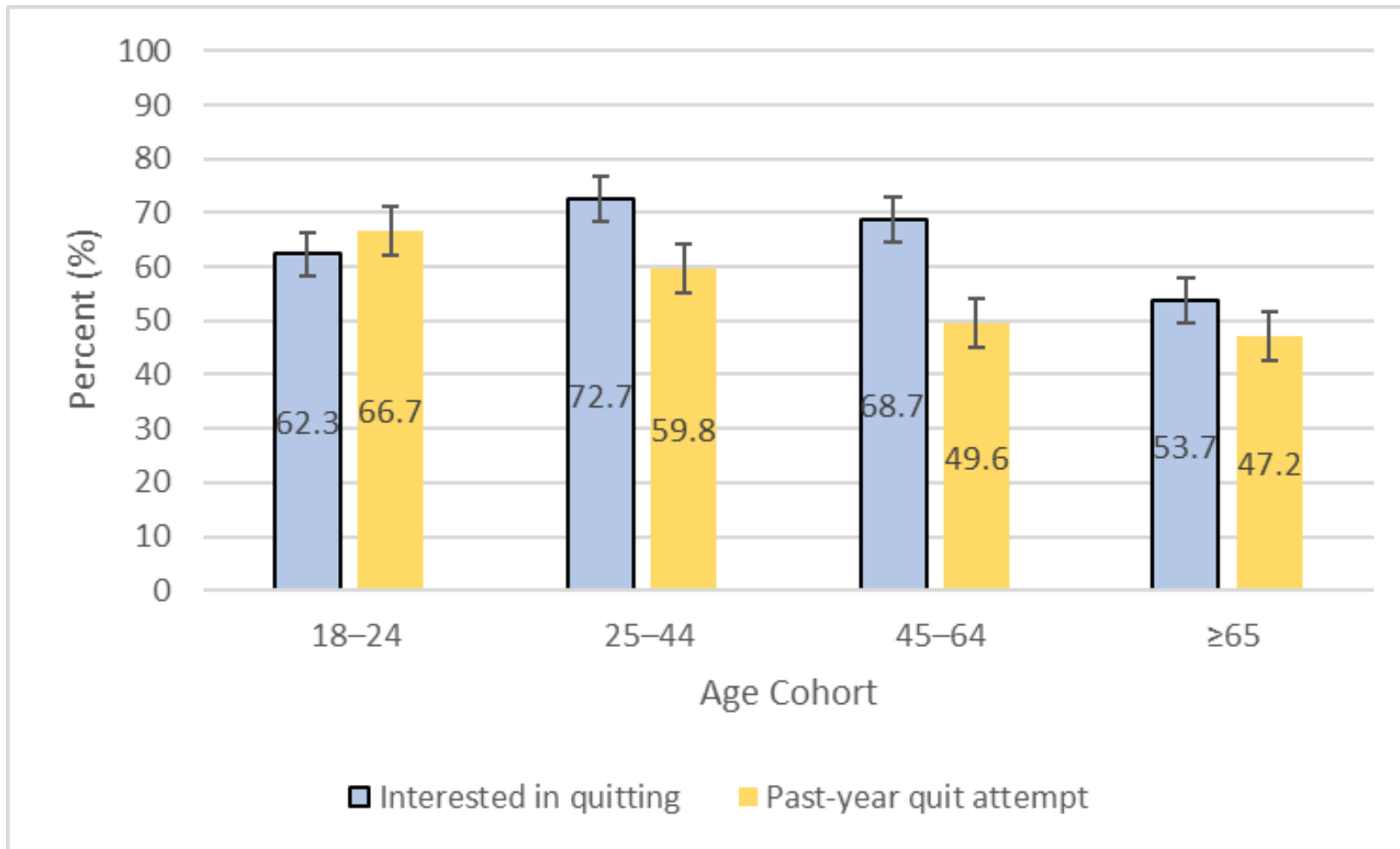
Abstinence during hospital stays risk factor for delirium (Hsieh et al., 2013).

Nicotine and Tobacco Misconceptions

- **Nicotine** is the primary agent of disease in tobacco products (older: 87.1% v. younger: 75.9%; Mumford et al., 2017).
- **Low nicotine cigarettes** are less likely to cause cancer than regular cigarettes (older: 56.6% v. younger: 42%; Byron et al., 2018).
- **E-cigarettes** are equally or more harmful than cigarettes (Majeed et al., 2017)

<u>Direction of Effects</u>	<u>Use Characteristics</u>	<u>References</u>
Older \geq Younger	Dependence	Ward et al., 2012; Cooper et al., 2016; Kaleta et al., 2016
	Duration of Smoking/Pack years	Jeremias et al., 2012; Chen et al., 2015
Older \leq Younger	Quit attempts	Messer et al., 2008; Babb et al., 2017
	Interest in quit aides	Jordan et al., 2017; Weaver et al., 2018

Quitting Smoking 2015 (United States)



Babbs et al., 2017; MMWR

Older smokers and cessation

- Limited number of studies (Cawkwell et al., 2015; Zbikowski et al., 2012).
- No changes in older smoker cessation rates between 2005 and 2012 (Isenberg et al., 2016).
 - “novel, more effective, cessation interventions” aimed at older smokers are needed (Isenberg et al., 2016)

Harm Reduction and Older Smokers

When abstinence is not feasible or desired by an older smoker, then a harm reduction approach might be most appropriate by respecting an older smoker's **autonomy** and giving the patient a role in deciding how to best reduce their harms from tobacco use.

THE NEW OLD AGE

Some Older Smokers Turn to Vaping. That May Not Be a Bad Idea.

By **Paula Span** “I’m not quitting smoking, I’m just trying this newfangled thing,” she told herself. “Three days later, I realized I hadn’t smoked a cigarette in three days. I thought, ‘This is working out kind of nice. Quitting is not supposed to be this easy.’”

Dec. 8, 2017





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Vaping for the over sixties, About me

5,190 views · 4 years ago

This is how I started vaping - it happened to me like it has happened to millions - by accident!

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Vaping With Vic

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Moving forward and challenges

- Inclusion: The older adult (not just youth!) in research, policy, and treatment.
- Communication: Tailoring health communication by age.
- Fear: 'renormalization' of smoking and e-cigarettes
- Technology: adoption of new products

THE WALL STREET JOURNAL.

U.S. Edition | June 9, 2018 | Today's Paper | Video

BUSINESS

Big Tobacco's Bet on a Smokeless Cigarette Cools

Philip Morris's IQOS device runs into resistance from older smokers with more fixed habits and competition from other smokeless products

Thanks and Acknowledgements

- Many thanks to GFN for inviting me to speak, and to Robyn Gougelet and Joe Gitchell for feedback.
- And to my Dad, Ray Kleykamp, who passed away in 2014 at age 63 as a smoker trying to switch to e-cigarettes.