

What influences youth and adult smoking?

Professor Melanie Wakefield
Director, Centre for Behavioural Research in Cancer

ACOSH 40th anniversary, November 2011

research



prevention

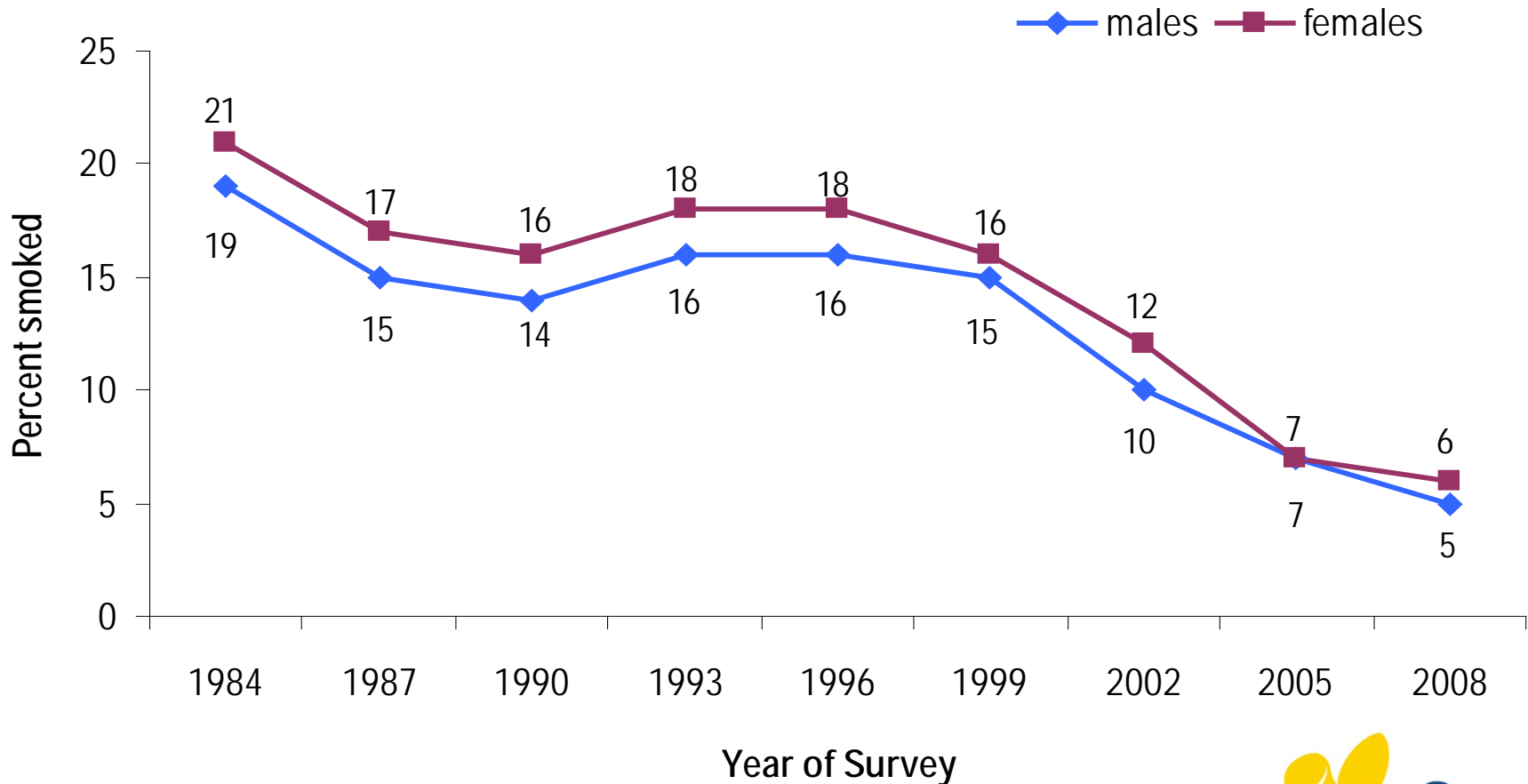


support



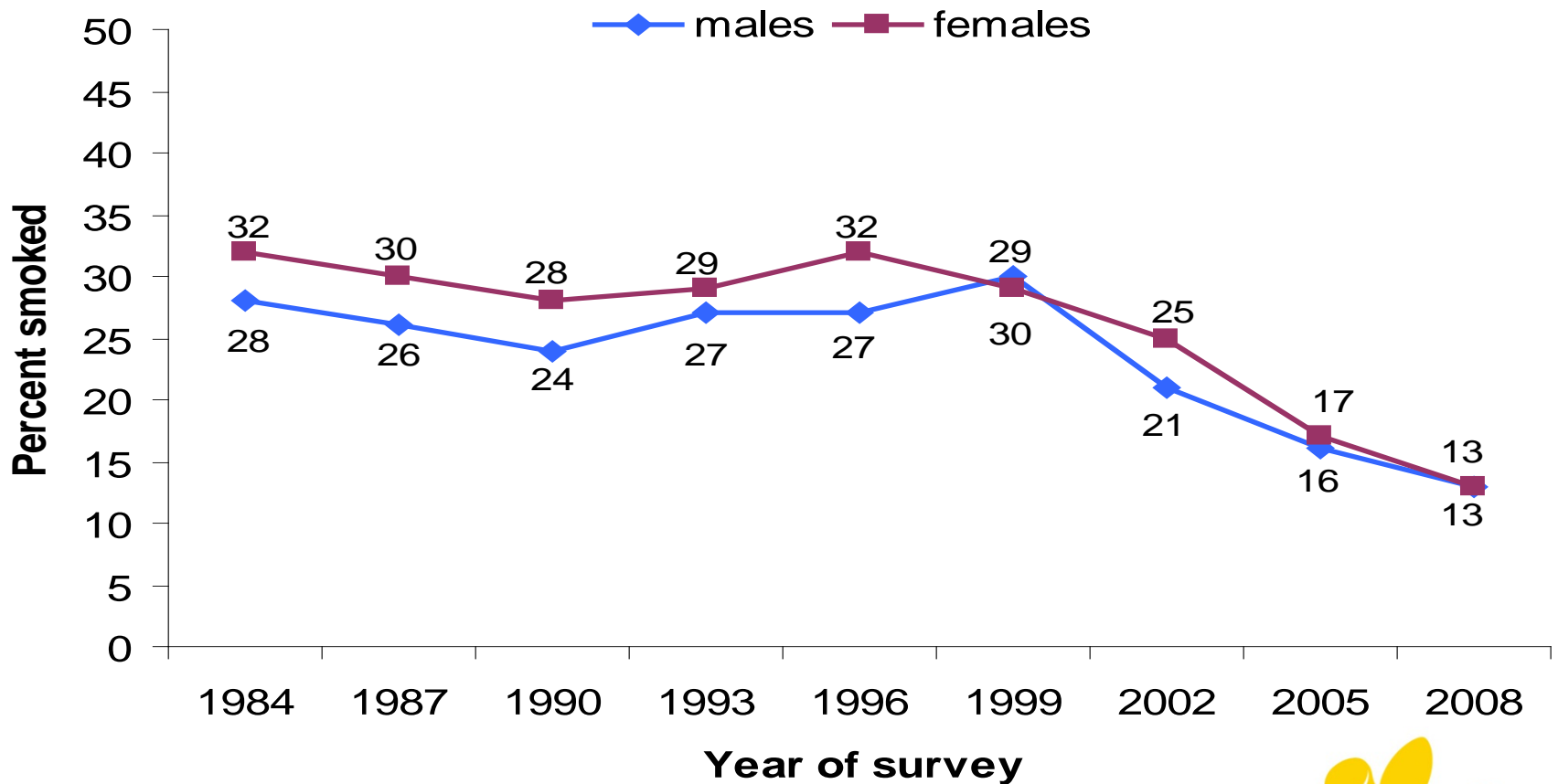
Trends in current smoking: gender

12- to 15-year-olds



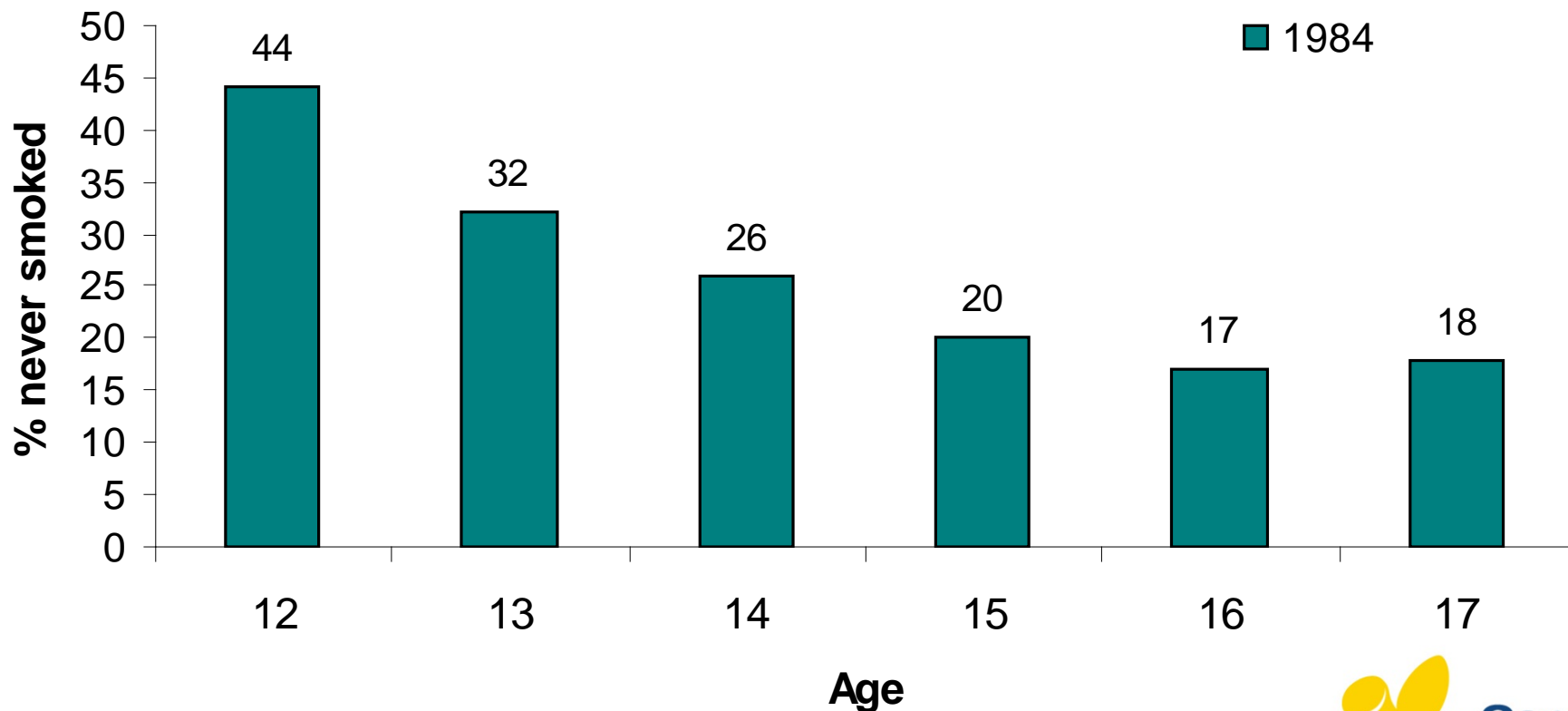
Trends in current smoking: gender

16- to 17-year-olds



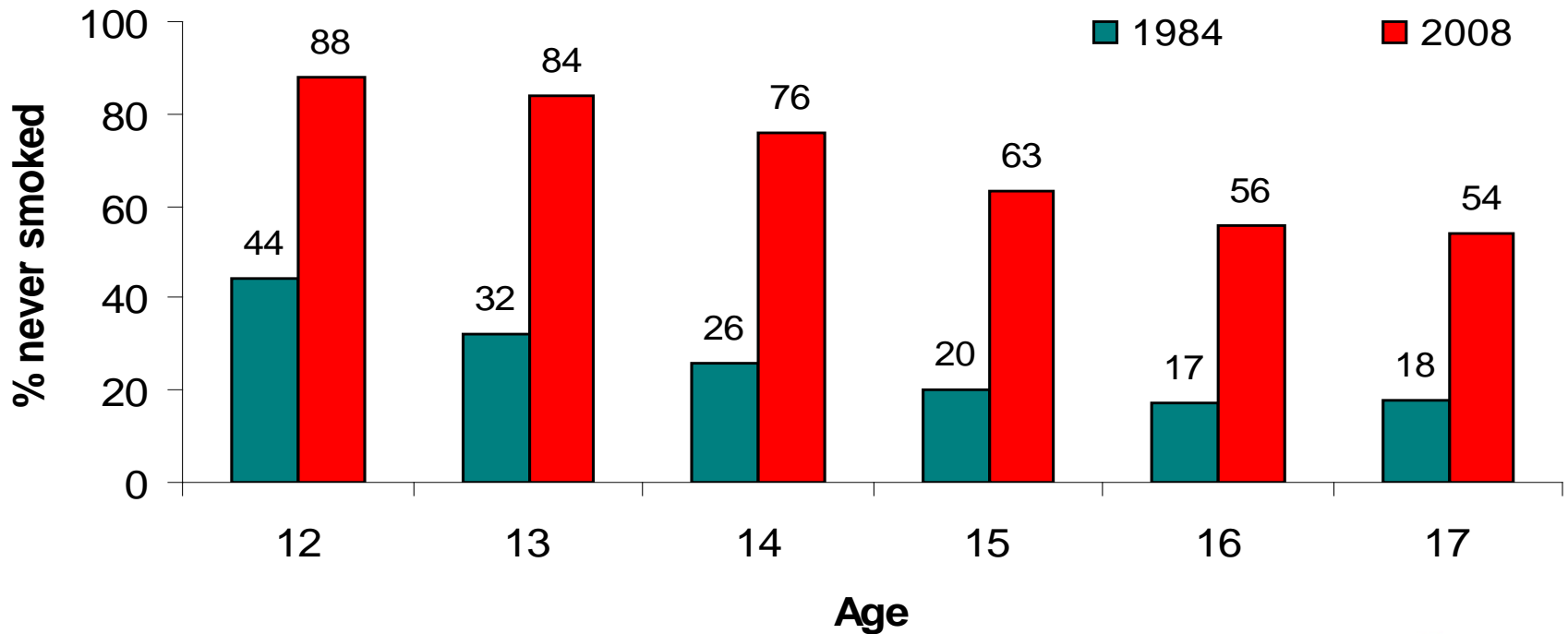
Smoke-free students

In 1984, less than half of students beginning secondary school (12 y.o.) had never smoked



Smoke-free students

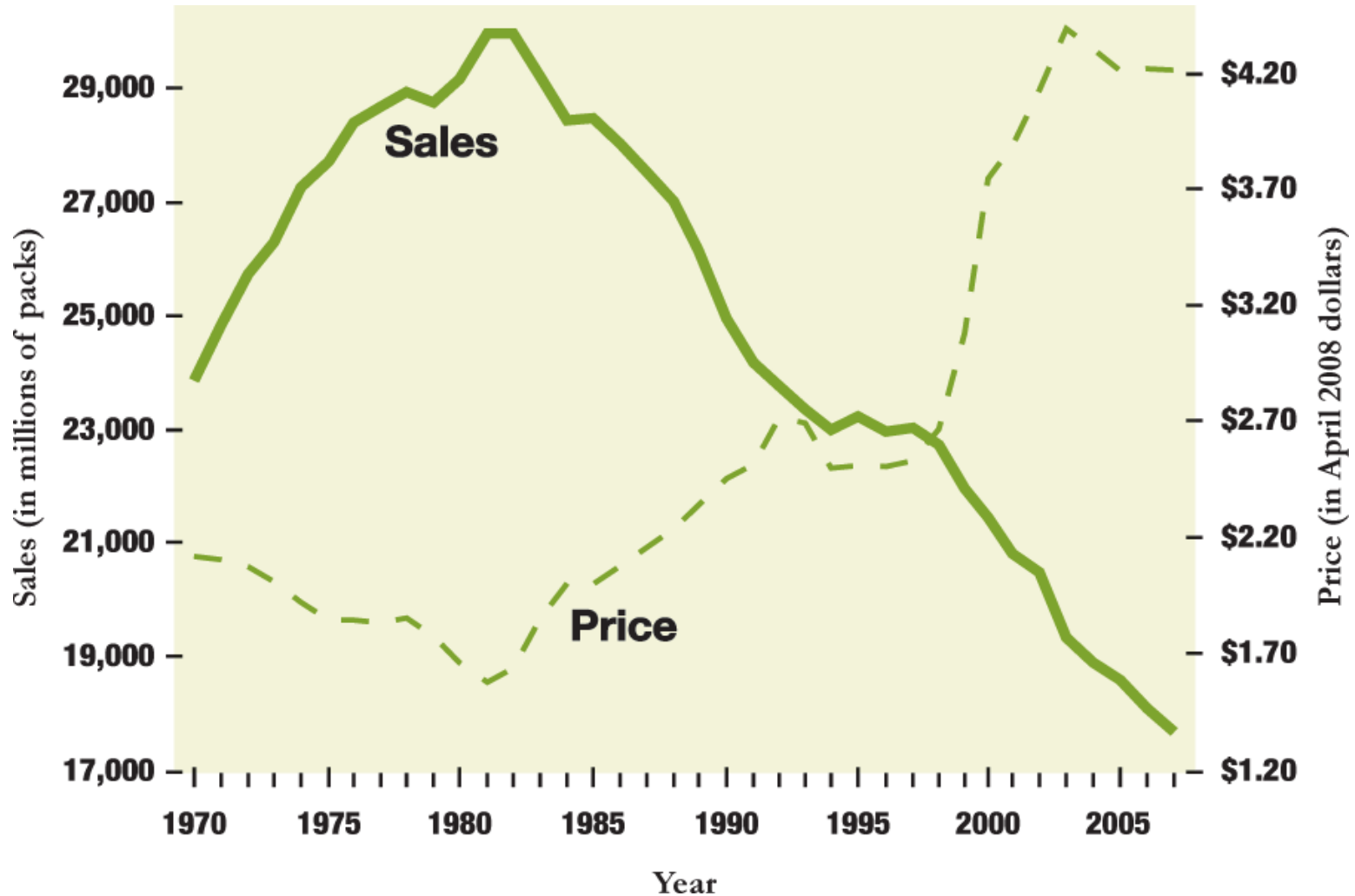
By 2008, half of all students made it through secondary school without having smoked



Policies that contribute to reducing smoking in youth and adults

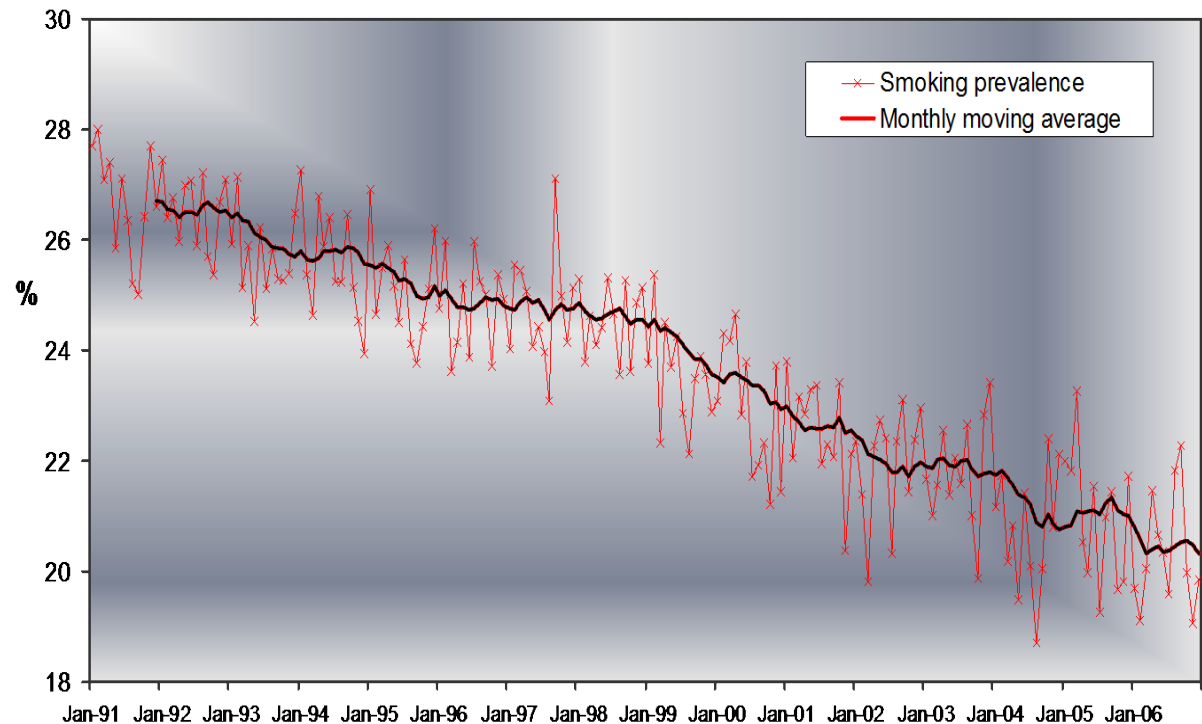
- Increases in cigarette price
- Mass media campaigns
- Establishment of indoor smoke-free policies
- Comprehensive restrictions on tobacco marketing
- Pack warnings

Cigarette prices + cigarette sales: USA 1970-2007



Price effects on Aust adult smoking

- Monthly smoking prevalence 1991-2006 in 5 largest states of Australia: monthly omnibus surveys by Roy Morgan Research
- Increases in cigarette prices significantly accelerated the rate of decline in monthly smoking prevalence
- Increases the rate of quit attempts



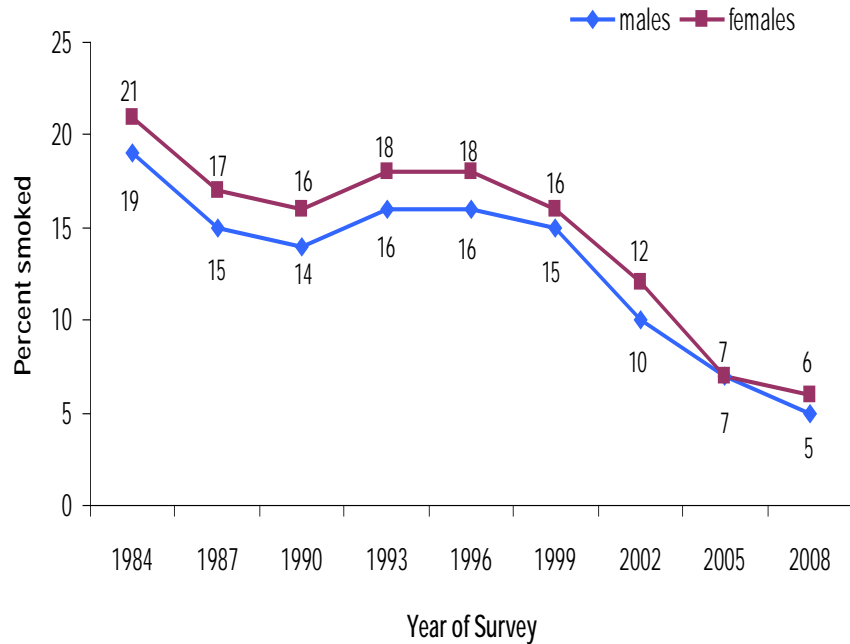
Average impact of every \$1 increase in price, Australia, 1990 to 2006

Income level	Decline in prevalence
Low	2.6%
Medium	0.3%
High	0.2%

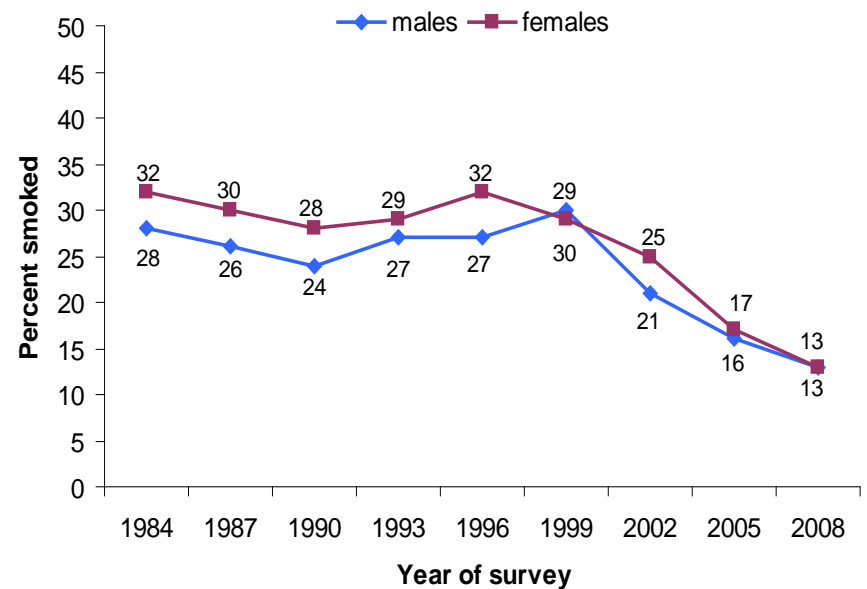
Siahpush M, Wakefield M, Spittal M, Durkin S & Scollo M. Taxation reduces social disparities in adult smoking prevalence. *American Journal of Preventive Medicine* 2009; 36: 285-91

Smoking in the past week among Australian secondary students

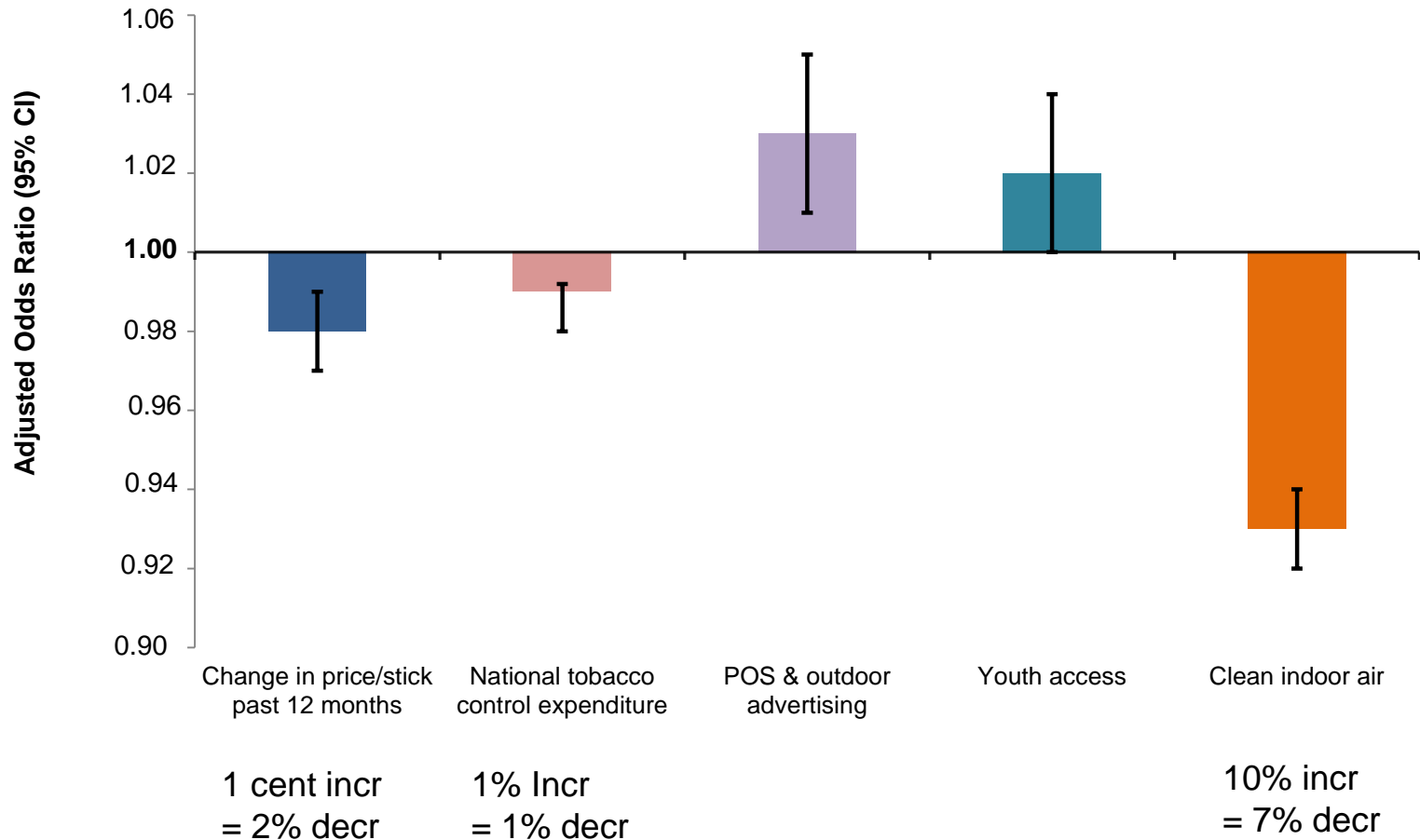
12- to 15-year-olds



16- to 17-year-olds



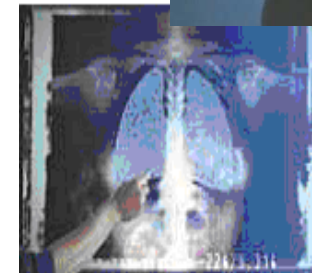
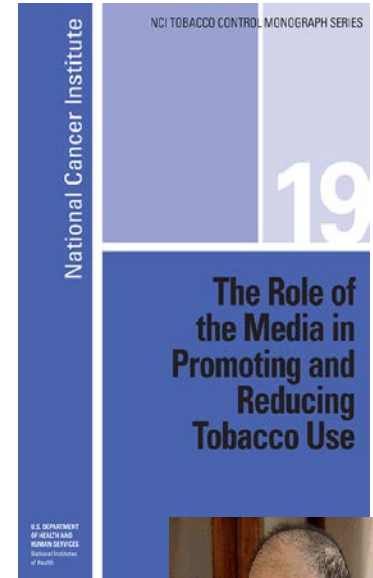
Stronger smoke free policies, more tobacco control \$ and increase in cigarette prices associated with lower Australian student smoking prevalence (adjusted odds ratios)



White et al. What impact have tobacco control policies, cigarette price and tobacco control funding had a Australian adolescents' smoking? Findings over a 15 year period. *Addiction* 2011

Mass media campaigns

- US National Cancer Institute: Monograph 19 (2008): 4 chapters on campaigns
- Review of mass media campaigns to change health behaviour: Wakefield, Loken & Hornik Lancet (2010)
- US Surgeon-General's Report on Youth Smoking (in press): Dr Sarah Durkin chapter on mass media campaigns
- Durkin, Brennan & Wakefield: review of media campaign effects on adult smoking Tobacco Control (for 20th anniversary issue)

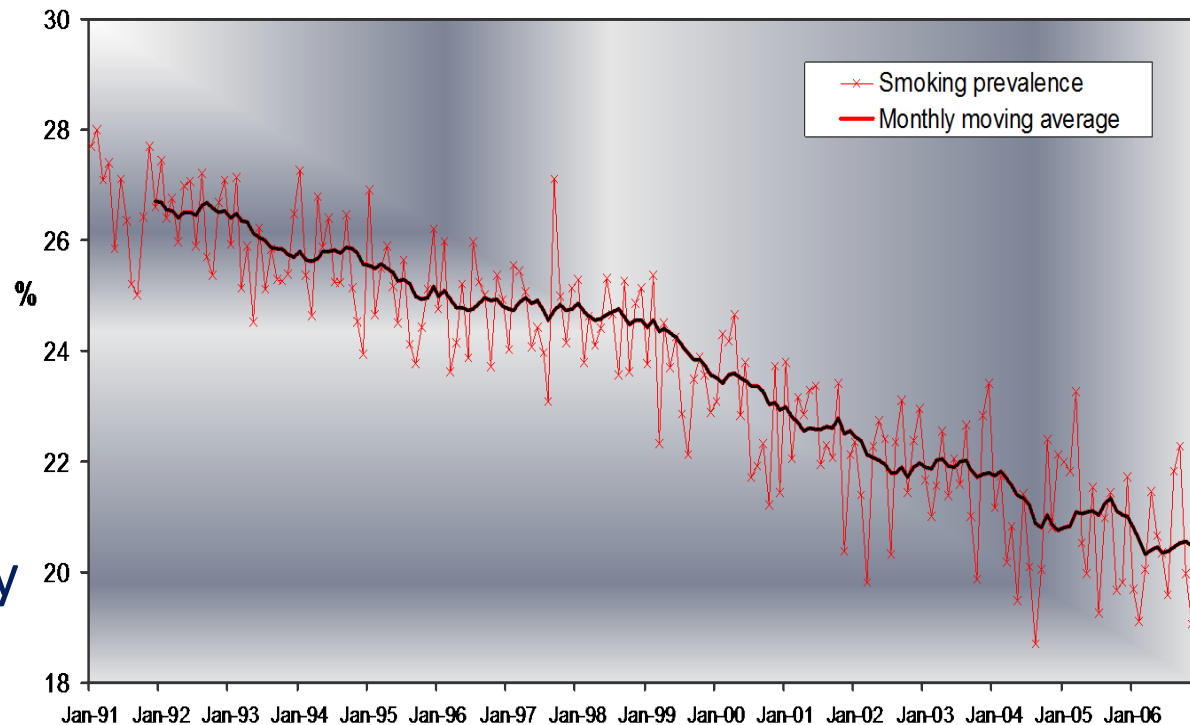


Mass media campaigns

- Strong evidence: reduce youth & adult smoking
- Effects depend on campaign reach, intensity & duration (>400 TARPs/mo; 700/mo is better)
- Widely broadcast campaigns provide more benefit to low SES smokers
- Negative emotion-evoking ads perform well, and with all population groups
- Adult campaigns also benefit youth smoking

Media campaign effects on Australian adult smoking

- Monthly smoking prevalence 1991-2006 in 5 largest states of Australia: monthly omnibus surveys by Roy Morgan Research
- Increases in exposure to mass media campaigns (Target Audience Ratings Points) significantly accelerated the rate of decline in monthly smoking prevalence



Effects of Different Types of Antismoking Ads on Reducing Disparities in Smoking Cessation Among Socioeconomic Subgroups

Sarah J. Durkin, PhD, Lois Biener, PhD, and Melanie A. Wakefield, PhD

Tobacco use inflicts the greatest burden of illness on those least able to afford it.^{1,2} An enormous challenge for tobacco control is how to tackle the consistently higher levels of smoking prevalence found among disadvantaged groups,^{3–5} especially because these gaps may be widening.^{6,7} Televised antismoking campaigns provide an effective population-wide method of preventing smoking uptake,^{8,9} promoting adult smoking cessation,¹⁰ and reducing adult smoking prevalence,¹¹ and research indicates that some types of ads may be more effective than others. Antismoking messages that produce strong emotional arousal, particularly personal stories or graphic portrayals of the health effects of smoking, tend to perform well¹²; they are perceived to be more effective than others, are more

Objectives. We assessed which types of mass media messages might reduce disparities in smoking prevalence among disadvantaged population subgroups.

Methods. We followed 1491 adult smokers over 24 months and related quitting status at follow-up to exposure to antismoking ads in the 2 years prior to the baseline assessment.

Results. On average, smokers were exposed to more than 200 antismoking ads during the 2-year period, as estimated by televised gross ratings points (GRPs). The odds of having quit at follow-up increased by 11% with each 10 additional potential ad exposures (per 1000 points, odds ratio [OR]=1.11; 95% confidence interval [CI]=1.00, 1.23; $P<.05$). Greater exposure to ads that contained highly emotional elements or personal stories drove this effect (OR=1.14; 95% CI 1.02, 1.29; $P<.05$), which was greater among respondents with low and mid-socioeconomic status than among high-socioeconomic status groups.

Conclusions. Emotionally evocative ads and ads that contain personalized stories about the effects of smoking and quitting hold promise for efforts to promote smoking cessation and reduce socioeconomic disparities in smoking. (*Am J Public Health.* 2009;99:2217–2223. doi:10.2105/AJPH.2009.161638)

Uptake in children in periods of high vs. low media intensity

SEIFA quartile	1987–1990 <i>moderate</i> activity Phase 1 (%)	1990–1996 <i>low</i> activity Phase 2 %	1996–2005 <i>high</i> activity Phase 3 %
Absolute change in prevalence in monthly smokers			
Lowest	-1		
Second	-2		
Third	0		
Highest	-1		

Source: White VM, Hayman J, Hill DJ. Can population-based tobacco-control policies change smoking behaviors of adolescents from all socio-economic groups? Findings from Australia: 1987-2005. *Cancer Causes and Control* 2008; 19(6): 631-40.

Uptake in children in periods of high vs. low media intensity

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Absolute change in prevalence in monthly smokers			
Lowest	-1		-12
Second	-2		-10
Third	0		-12
Highest	-1		-13

Source: White VM, Hayman J, Hill DJ. Can population-based tobacco-control policies change smoking behaviors of adolescents from all socio-economic groups? Findings from Australia: 1987-2005. *Cancer Causes and Control* 2008; 19(6): 631-40.

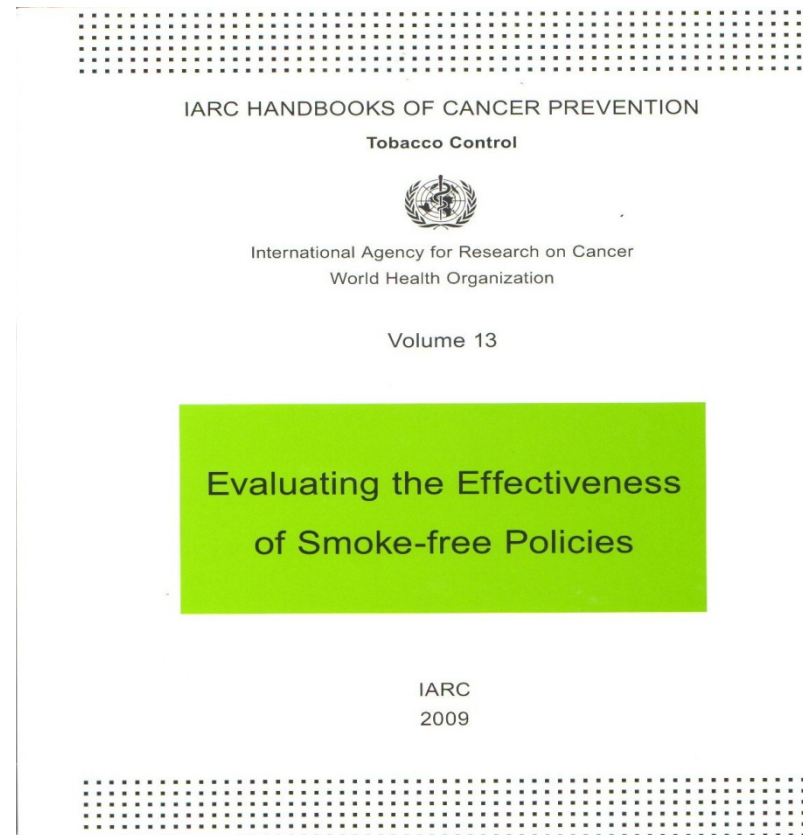
Uptake in children in periods of high vs. low media intensity

SEIFA quartile	1987–1990 <i>moderate</i> activity Phase 1 (%)	1990–1996 <i>low</i> activity Phase 2 %	1996–2005 <i>high</i> activity Phase 3 %
Absolute change in prevalence in monthly smokers			
Lowest	-1	+6	-12
Second	-2	+3	-10
Third	0	+1	-12
Highest	-1	+1	-13

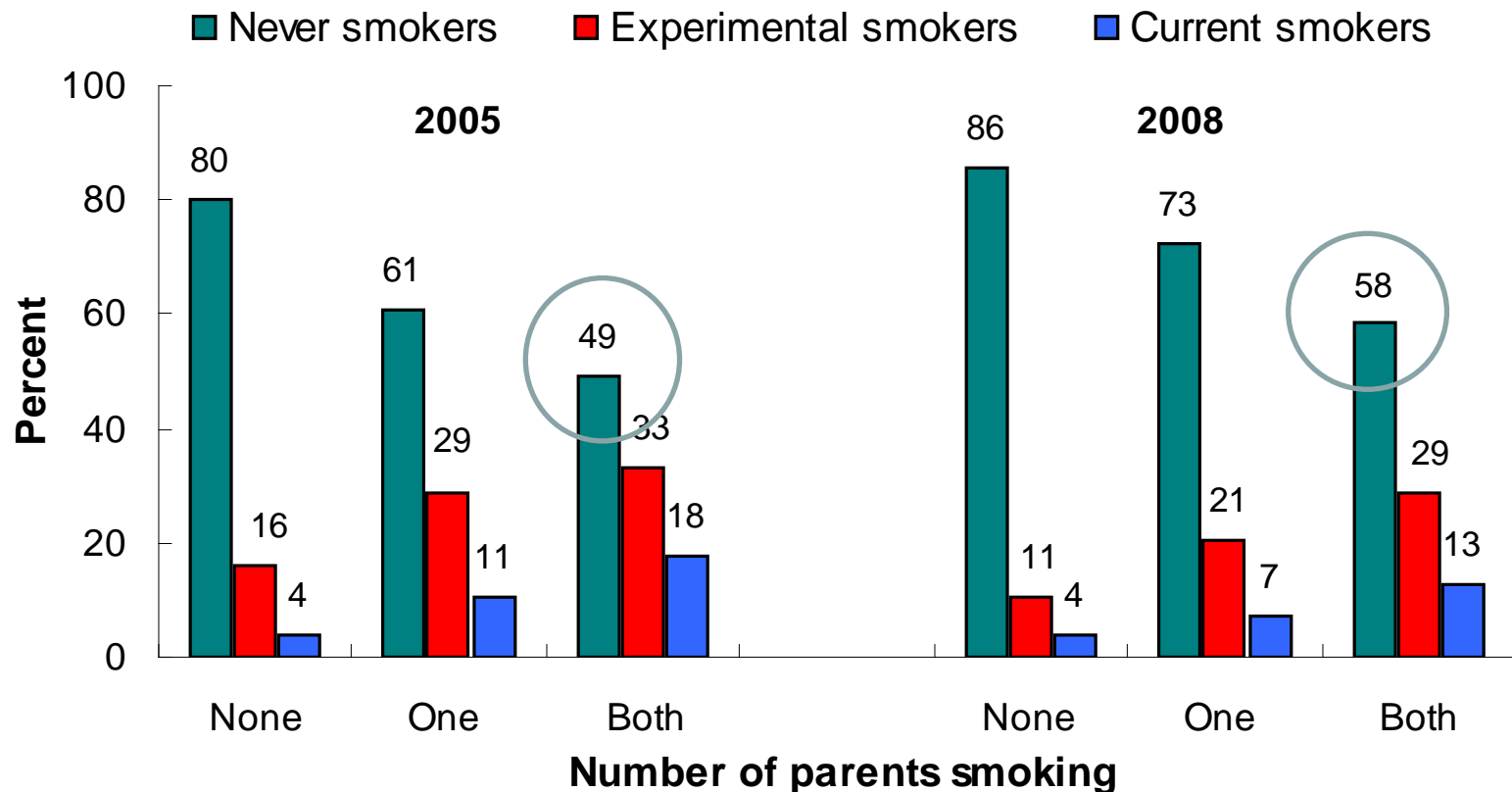
Source: White VM, Hayman J, Hill DJ. Can population-based tobacco-control policies change smoking behaviors of adolescents from all socio-economic groups? Findings from Australia: 1987-2005. *Cancer Causes and Control* 2008; 19(6): 631-40.

Smoke-free policies

- Workplaces health care institutions, restaurants, pubs, casinos, shops, schools, homes, cars...
- Total bans protect from exposure to secondhand smoke
- Increases likelihood that workers will quit
- Reduces amount smoked by smokers
- De-normalizes smoking
- ...and reduces the rate of youth smoking uptake

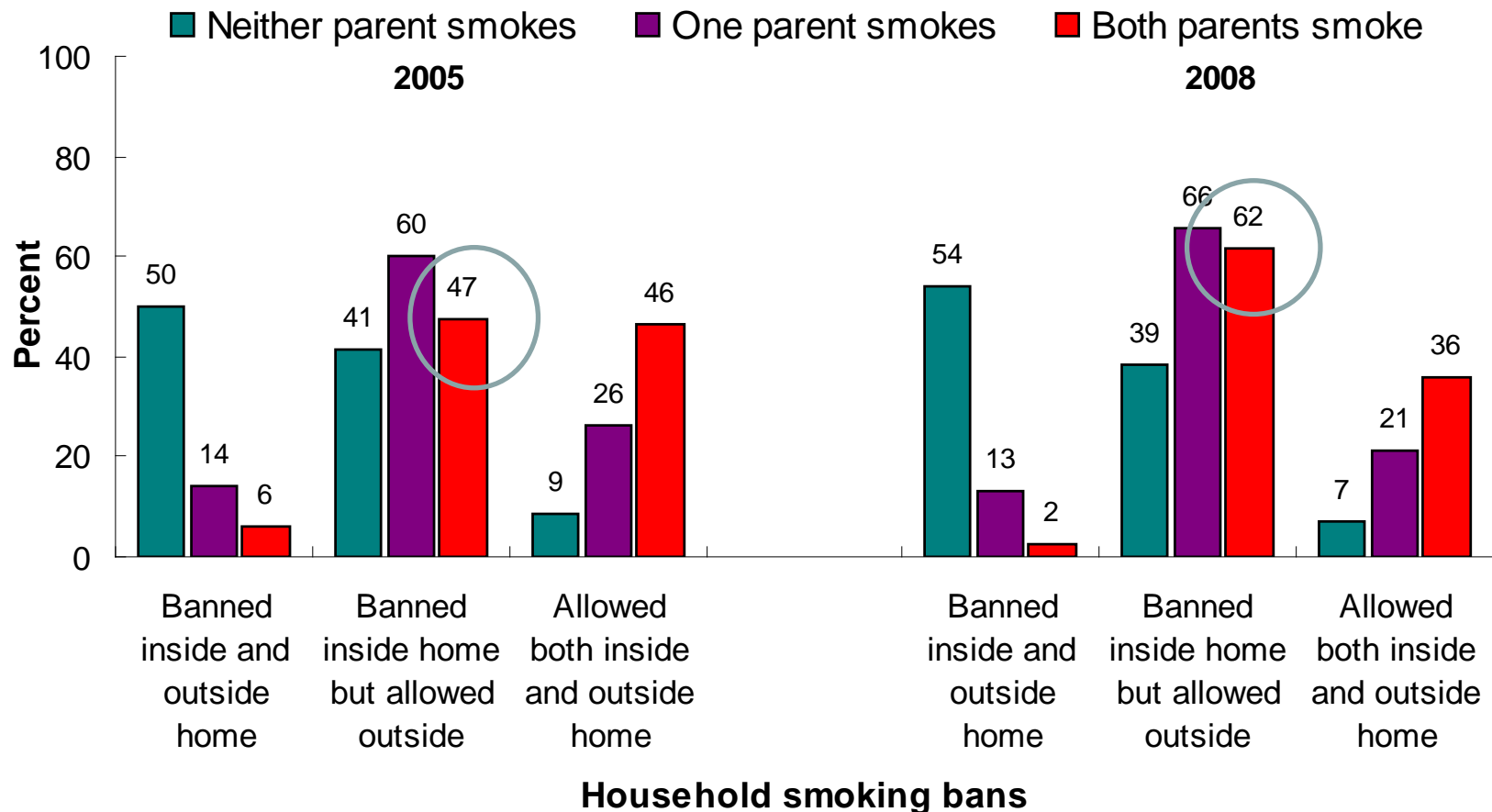


Students with both parents who smoke, most likely to be smokers, but % of never smokers among this group increased 2005-2008.



Smoking bans at home

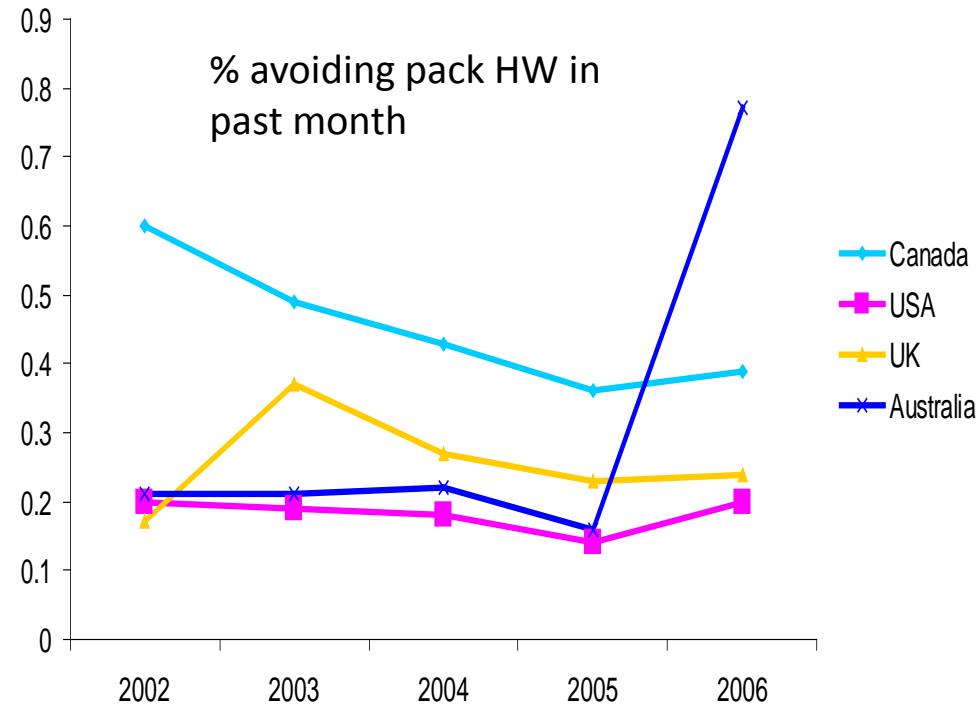
% students with both parents smoking reporting smoking banned inside increased



Pack health warnings

Hammond review *Tobacco Control* (2011):

- Larger and pictorial health warnings more salient
- Increase knowledge of health harms
- Increases quitting micro-behaviours e.g. covering warnings; foregoing a cigarette; smoking delay
- These all predict successful quitting in cohort studies

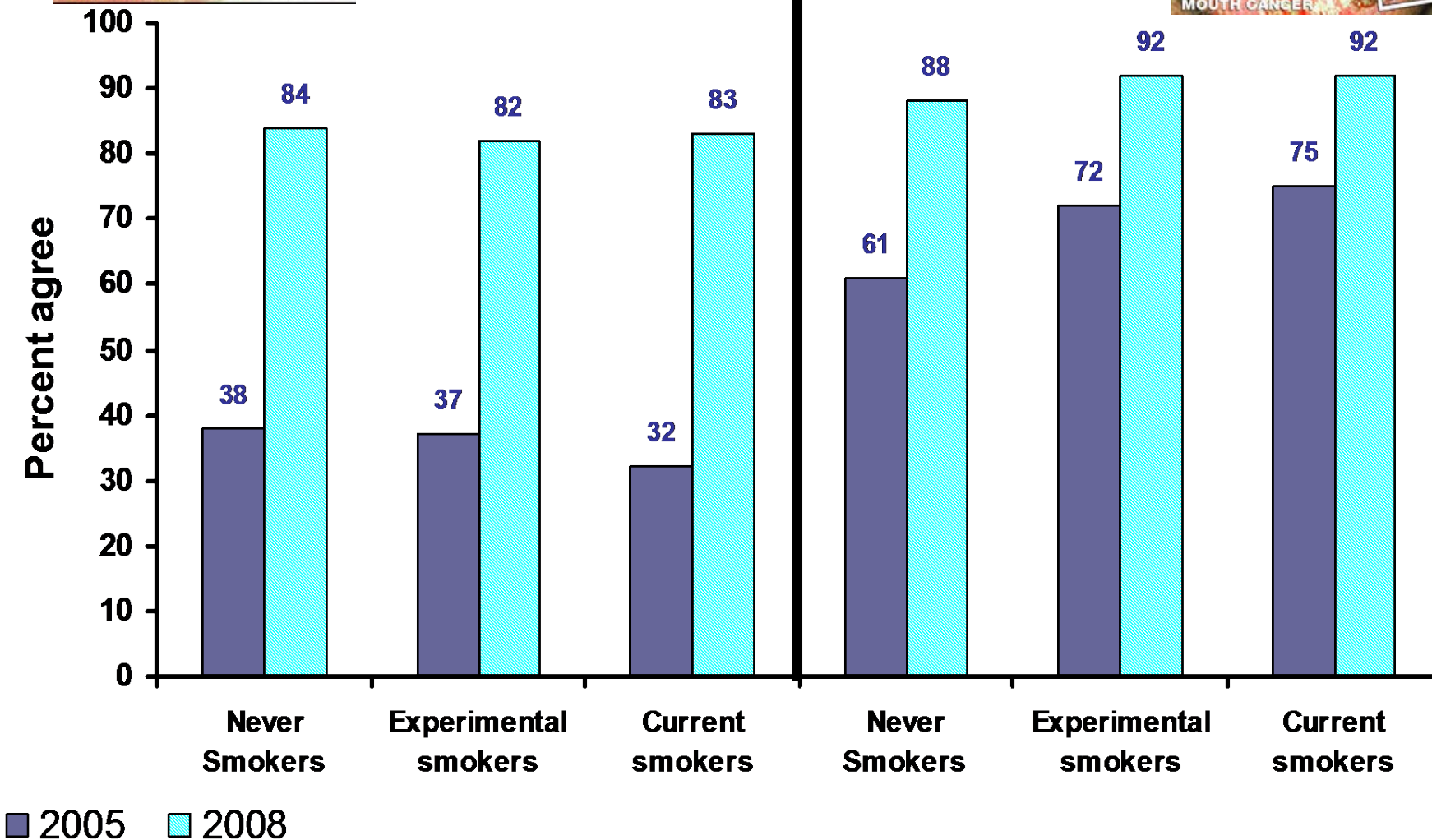


Borland et al *Tobacco Control* 2009

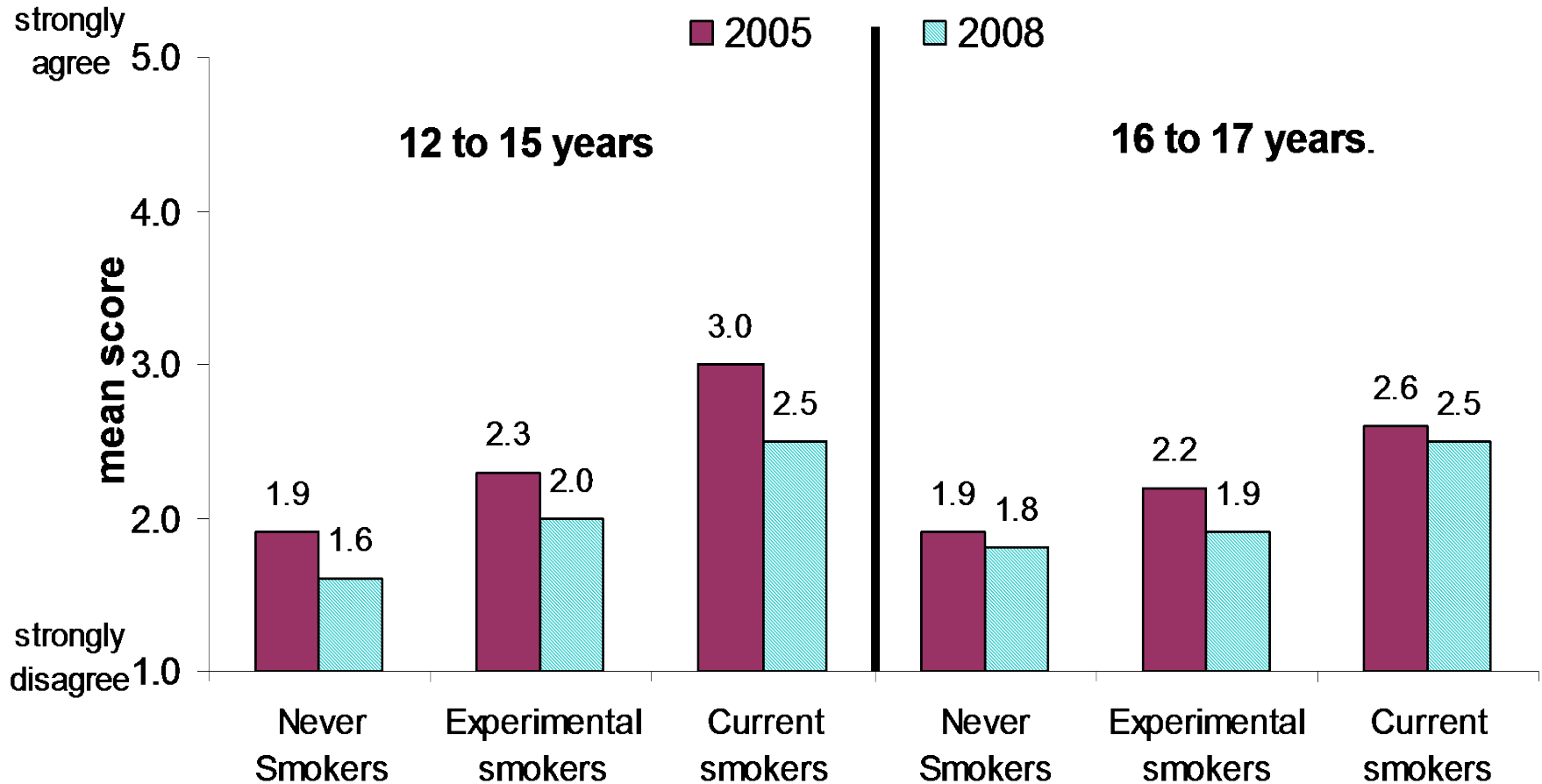


Diseases in fingers, toes

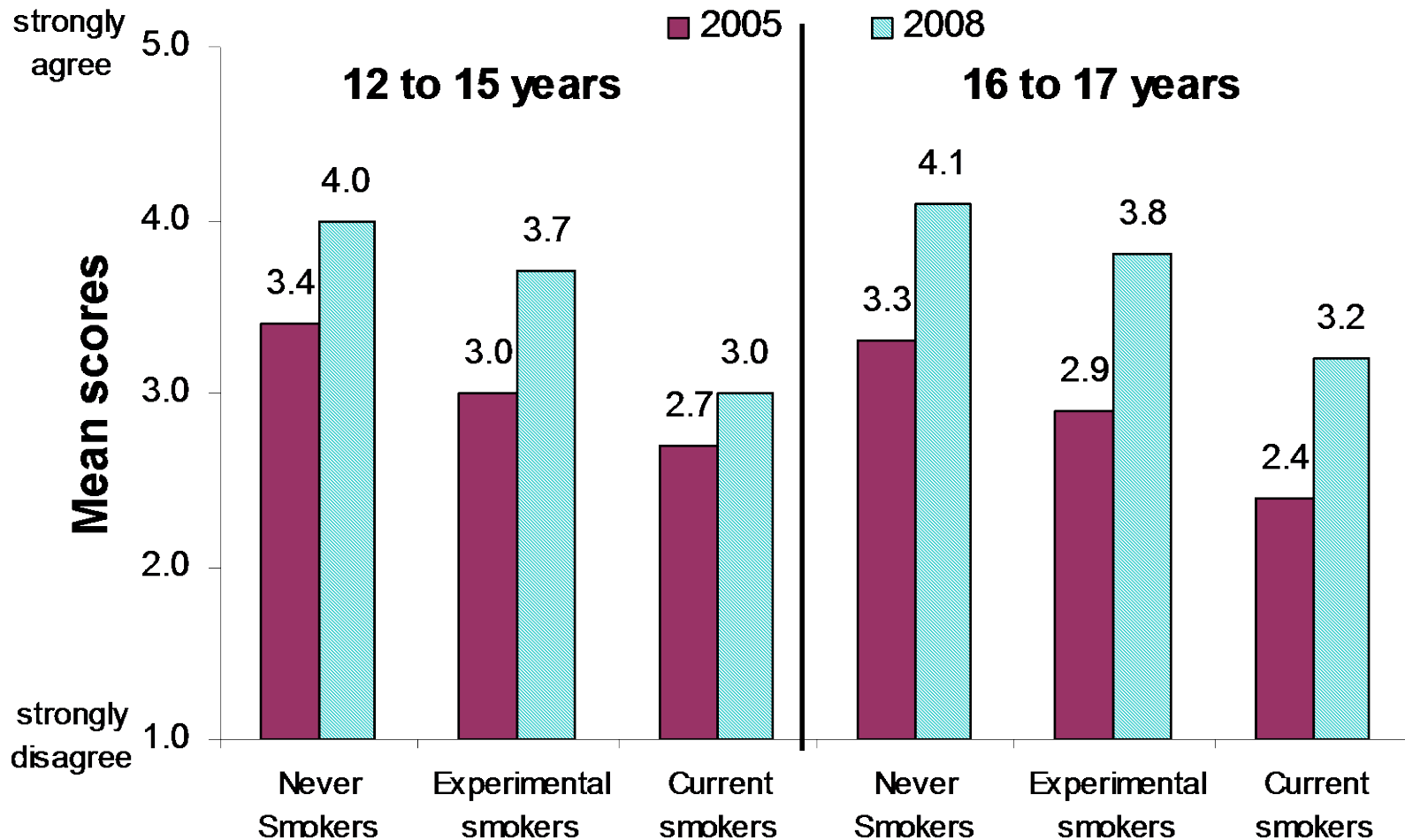
Mouth Cancer



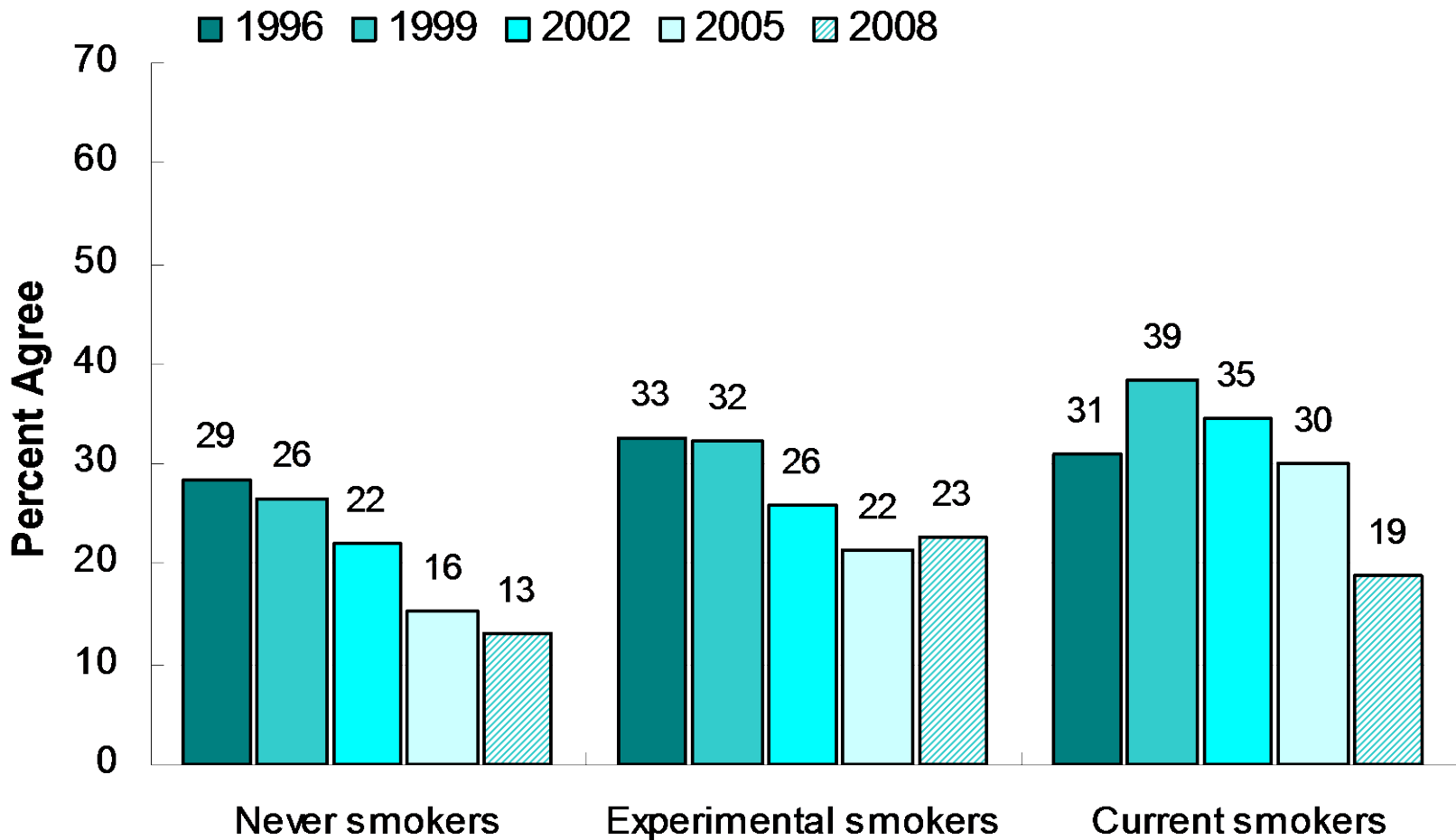
Cigarette pack seen less positively: decrease in pack looks “cool”



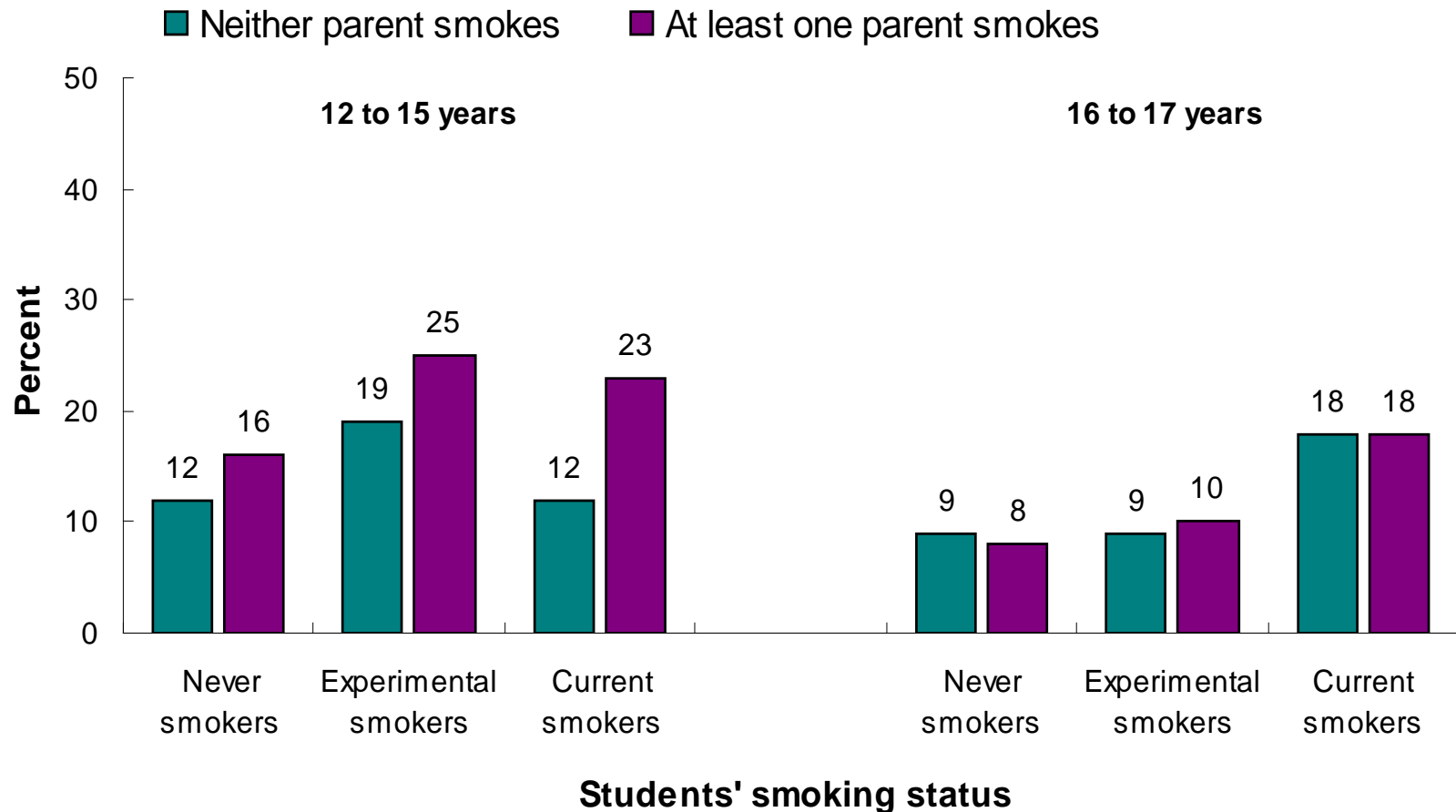
Cigarette pack seen more negatively: increase in pack looks “disgusting”



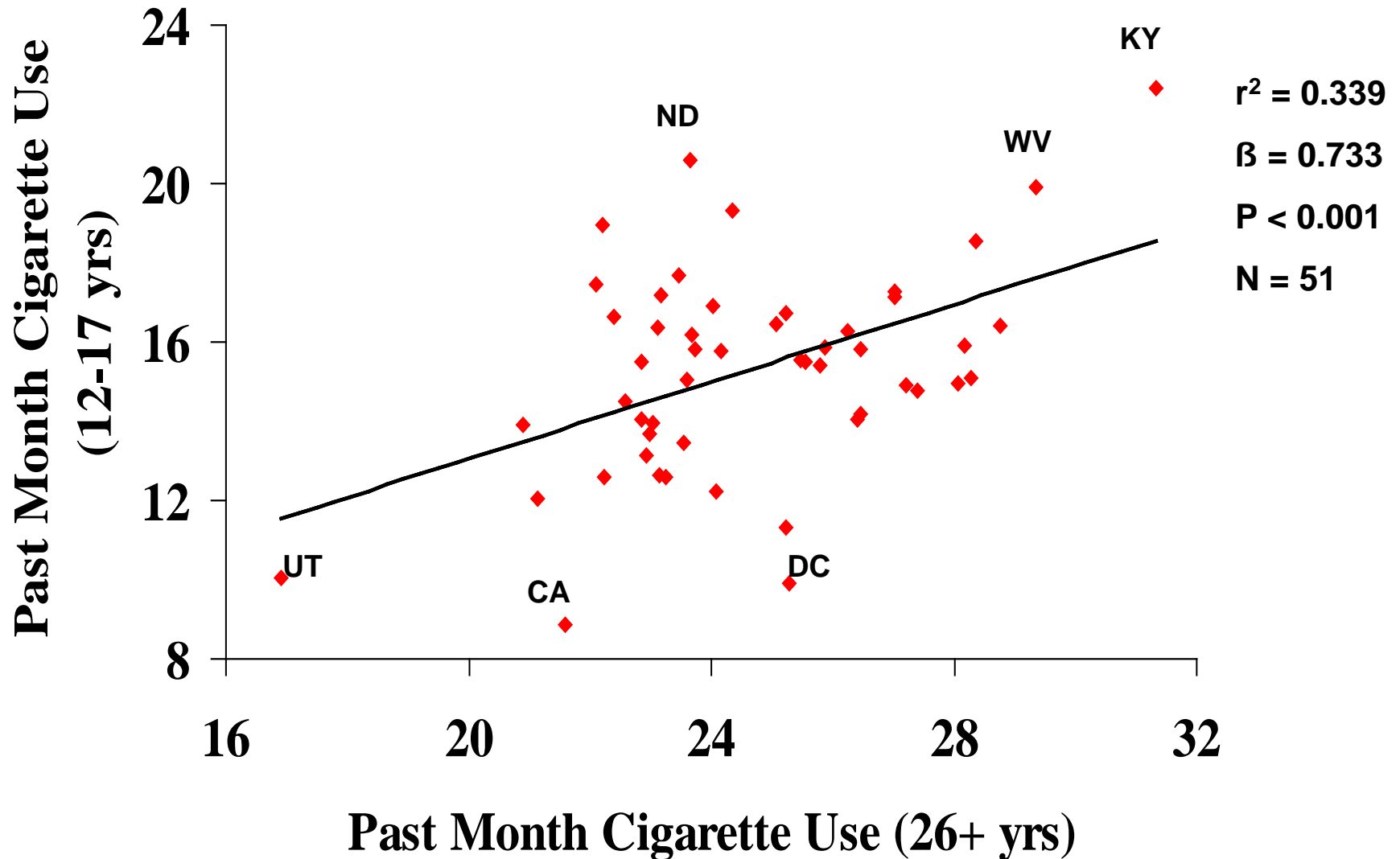
Smokers usually more popular than non-smokers:



Young students with parents who smoke think smokers are more popular



Prevalence of Past Month Cigarette Use Among Youth (12-17 yrs) and Adults (26+ yrs) in the United States, 1999-2000



Sources:
(NHSDA)

1999-2000 National Household Survey on Drug Abuse

Needs for the future

- Tobacco tax increases
- Ongoing mass media campaigns at high reach and frequency
- Plain packaging
- Product regulation
 - Menthol
 - Filter-venting

