
Tobacco, Alcohol, and Other Risk-Taking Behaviors

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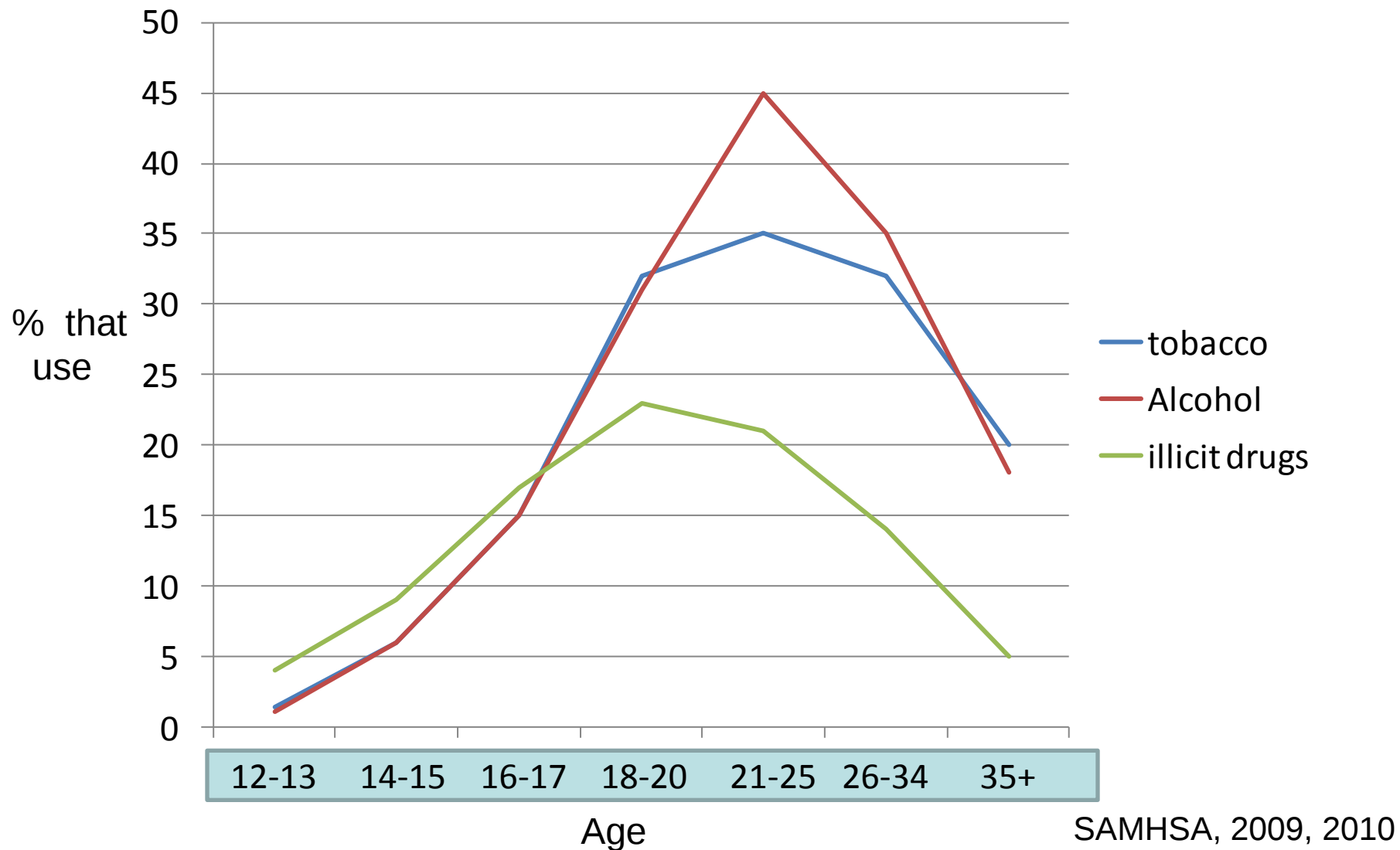


Key Points:

- There is very limited data on AYAs & substance use
- The role mental health plays in CCS/AYA substance use is largely unexplored
- Social determinants are key but largely ignored
- Are limited systematic efforts to address substance use in context of survivorship care



Substance Use Trajectories- General Population



Substance Use— The Problem for AYAs

- Tobacco may exacerbate treatment-related risk of cardiac and pulmonary toxicities and increase risk of lung cancer
- Alcohol is associated with the increased risk aerodigestive cancers in adult survivors and may increase risk of myocardial dysfunction, liver damage, osteoporosis and breast cancer
- Drug use can induce or exacerbate depression, anxiety, PTSD, impacts of traumatic brain injury, insomnia (general population)

Survivors							Sibs/ Gen Pop
US CCSS (~ 14k)	Brit CCSS (~ 17k)	Can CCS & AYA (~ 1200)	Swiss CCSS (~1700)	Australian CCSS (~1530)	BRFS- CCS (~ 680)	BRFS- AYA (~4K)	

Tobacco Prevalence among CCS/AYA

Survivors							Sibs/ Gen Pop
US CCSS (~ 14k)	Brit CCSS (~ 17k)	Can CCSS (~ 1200)	Swiss CCSS (~1700)	Australian CCSS (~1530)	BRFS CCS (~ 680)	BRFS AYA (~4k)	
<u>Cigs</u> 17%	20%	22.6	24%	16% (< 18 ya) 29% (18+)	37%	29%	= ↓/↓ Cohorts ↑ BRFS
<u>Smokeless</u> 8%					4%		↓

Smoking Characteristics of Childhood/AYA Survivors

Characteristic	PFH1- CCS N=796	PFH2- CCS/AYA N=374
Smoking rate	12 cigs/day	15 cigs/day
Quit attempts, past yr	58%	65%
Nicotine dependent	53%	47%
Readiness: Contemplation	43%	22%
Readiness: Preparation	39%	63%
Age at enrollment	31	32

Alcohol Prevalence among CCS/AYA

Survivors							Sibs/Gen Pop
US CCSS (~ 14k)	Brit CCSS (~ 17k)	Can CCSS (~ 1200)	Swiss CCSS (~1700)	Australian CCSS (~1530)	BRFS CCS (~ 680)	BRFS AYA (~4k)	
<u>Any:</u> 73%	77%		54%	55% (< 18 ya) 90% (18+)	53%		↑ ↓ =/ = ↑
<u>Heavy:</u> 16%	24%		22%				↓/↓
<u>Binge</u>			18%	15% (y<18 ya) 53% (18+)	19%	14%	↓ cohort = BRFS

Drug Use Prevalence among AYAs

Survivors							Sibs/Gen Pop
US CCSS (~ 14k)	Brit CCSS (~ 17k)	Can CCSS (~ 1200)	Swiss CCSS (~1700)	Australian CCSS (~1530)	BRFS CCS (~ 680)	BRFS AYA (~4k)	
<u>Cannabis</u> 12%				20% (<18 ya) 49% (18+)			=/↓
<u>Illicit</u> < 1%				7% (< 18 ya) 24% (18+)			=

* subset; Klosky, et al., 2012; ** Bauld, et al., 2005

Behavior Clusters Among CCS

- **‘risk-avoiding’** (42%), individuals who did not, or only to a minor extent, engage in risk behaviors, and who reported health-protective behaviors
- **‘moderate drinking’** (39%), ‘risk-avoiders’, but engaged more frequently in PA & alcohol consumption
- **‘smoking’** (5%): low engagement in health-protective behaviors and likely to smoke, but not to drink
- **‘risk-taking’** (14%): engage in all assessed risk behaviors: smoking, marijuana consumption and alcohol use, including binge drinking.; lower engagement in health-protective behaviors

Factors Associated w/ Substance Use in CCS/AYAs

Smoking:

- Less education /lower income
- White race
- Highly networked w/ smokers
- Stress
- Lower mental health scores

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Smoking:

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- **Lower mental health scores**

Alcohol Use/Binge drinking:

- **Less education/lower income**
- Male gender
- **Stress**
- **Depression, anxiety, somatization, cancer-related anxiety**

Drug Use:

Lower income

Lower mental health scores

Higher popularity/peer acceptance

The Importance of Prevention

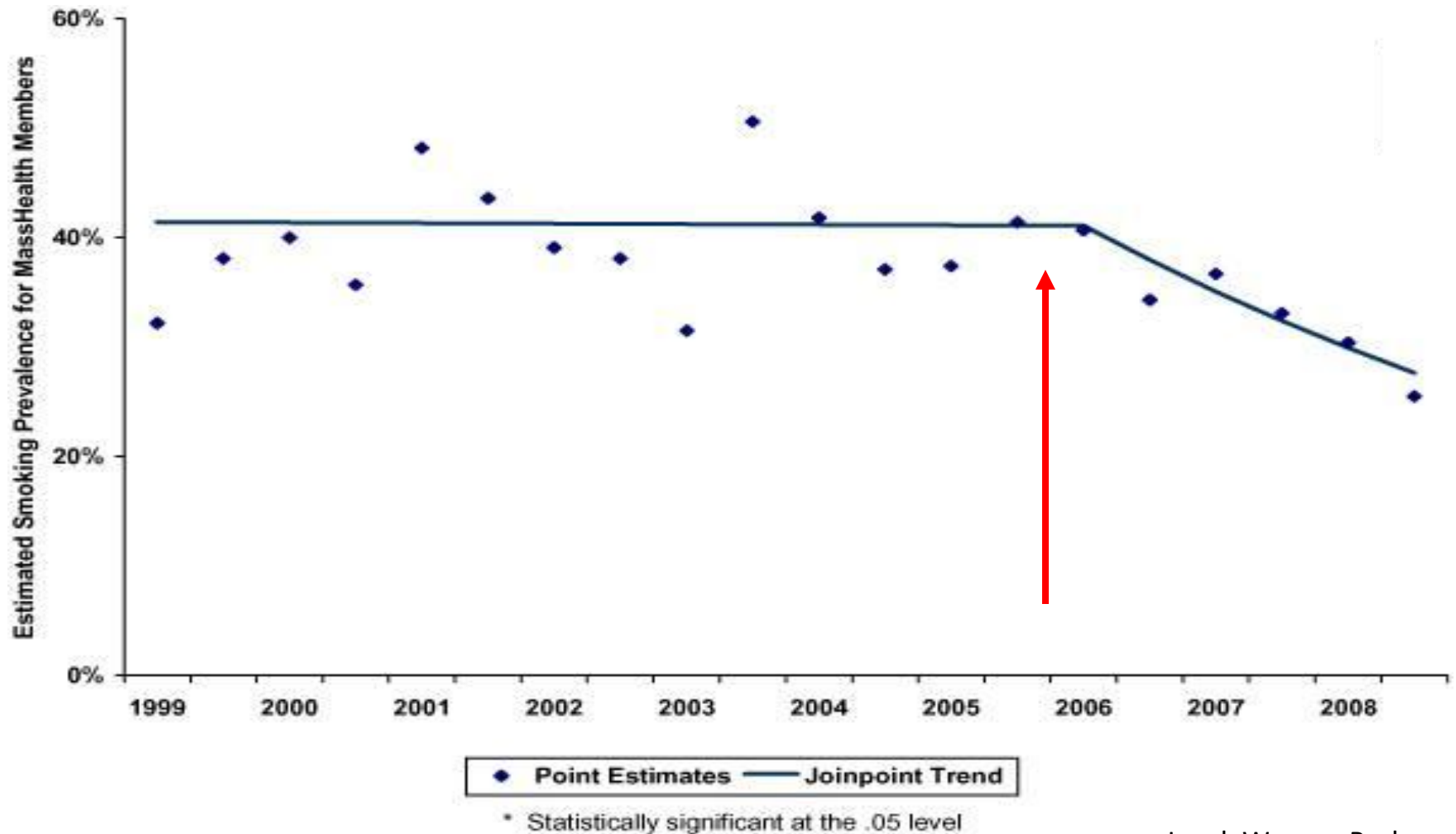
- Amongst non-smokers, 57% of survivors aged 10–18 years old were uncertain about whether they would smoke in the future¹
 - less knowledge of tobacco related health risks meant greater intentions to smoke
- Multi-component prevention intervention increased perceived vulnerability & reduced intentions to smoke²
- Know little about prevention of alcohol or illicit drug use in AYA

¹Clark & Eiser '07; ²Tyc, et al., 2003

How Can We Accelerate Risk Reduction??

- Effective interventions for prevention and treatment of risk behaviors
- Best practice tools for :
 - early identification of young survivors with or at risk for health-compromising behaviors
 - Systematic delivery of interventions
- Policies to support access to EBIs

Smoking Prevalence among MA Medicaid Smokers



Other Gap Areas

- Is there a safe level of alcohol and cannabis use?
- How will CCS/AYAs respond to reduced harm tob products?
- How to increase engagement w/ interventions?
- How important are survivor-focused interventions?
 - 43% of AYAs interested in meeting peer survivors (Kent, et al., 2013)
- How to address social and communication needs:
 - 25% of AYAs need help talking w/ family/friends about CA experience
- How to address social determinants?
- How best to address mental health issues in context of prevention and treatment?
- How to address risky health behaviors in CCS/AYAs in context of health care delivery system?

What Don't We Need to Study More?

- Epidemiology of tobacco use in CCSs
- Comparison of CCS risk behaviors vs. sibs or general population
- Focus on individual interventions without incorporating the delivery system



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Acknowledgements

National Cancer Institute

Elaine Puleo

Kim Sprunck-Harrild

Janet de Moor

Ann Lown

Shoshanna Rosenberg

Fred Li

Elyse Park

Ann Mertens

Lisa Diller

Vida Tyc

Mark Greenberg

David Hodgson

Jennifer Ford

Jamie Ostroff

Thank you!