

Trends in Suicidal Thoughts, Plans, and Attempts by Non-Metropolitan and Metropolitan Residence

Ty Borders, PhD

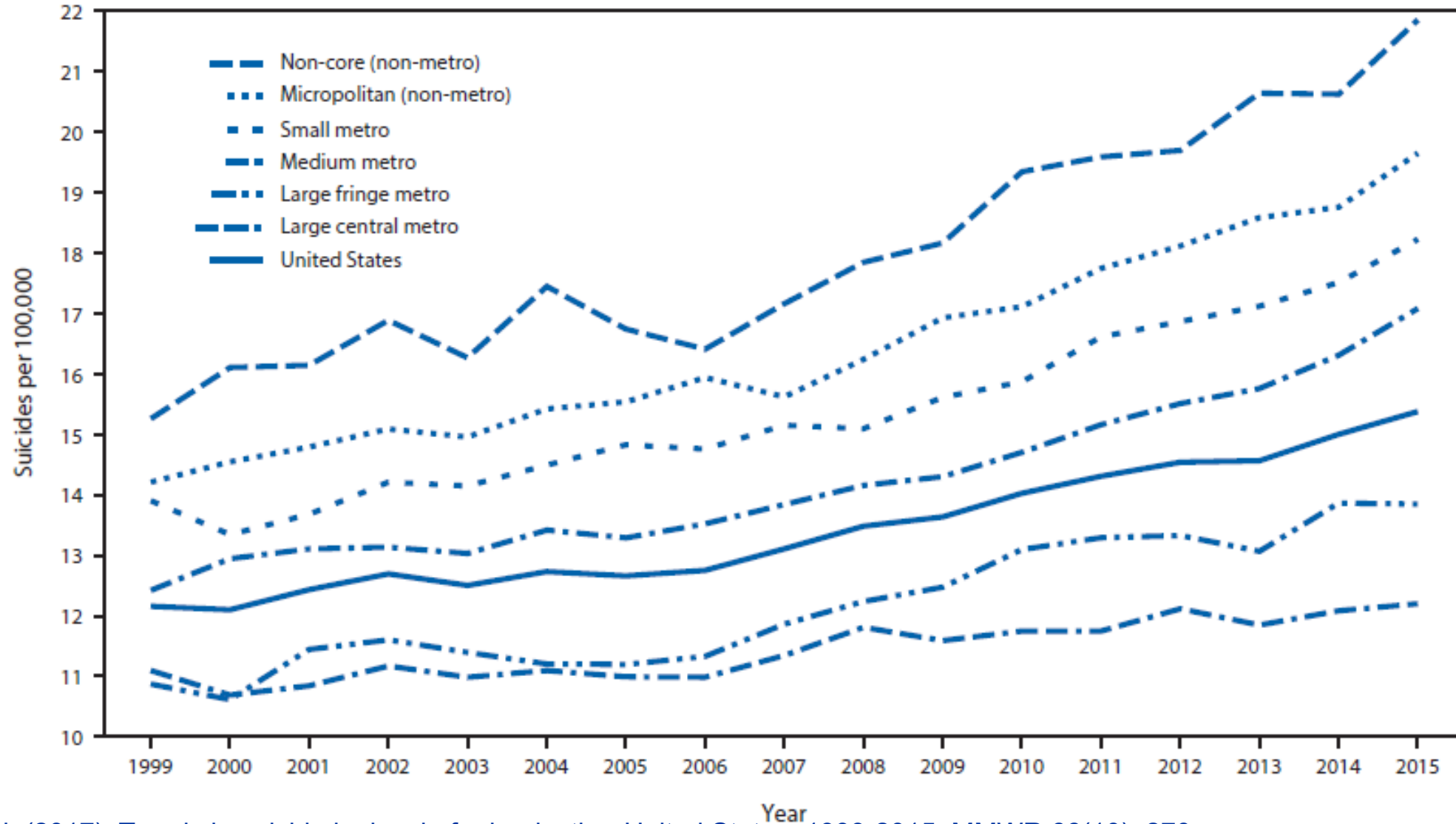
Professor and Foundation for a Healthy Kentucky
Endowed Chair in Rural Health Policy

Director, Rural and Underserved Health Research Center
University of Kentucky



Metro/Non-Metro Suicide Rate Trends

Per 100,000 residents aged ≥ 10 years, age-adjusted to year 2000

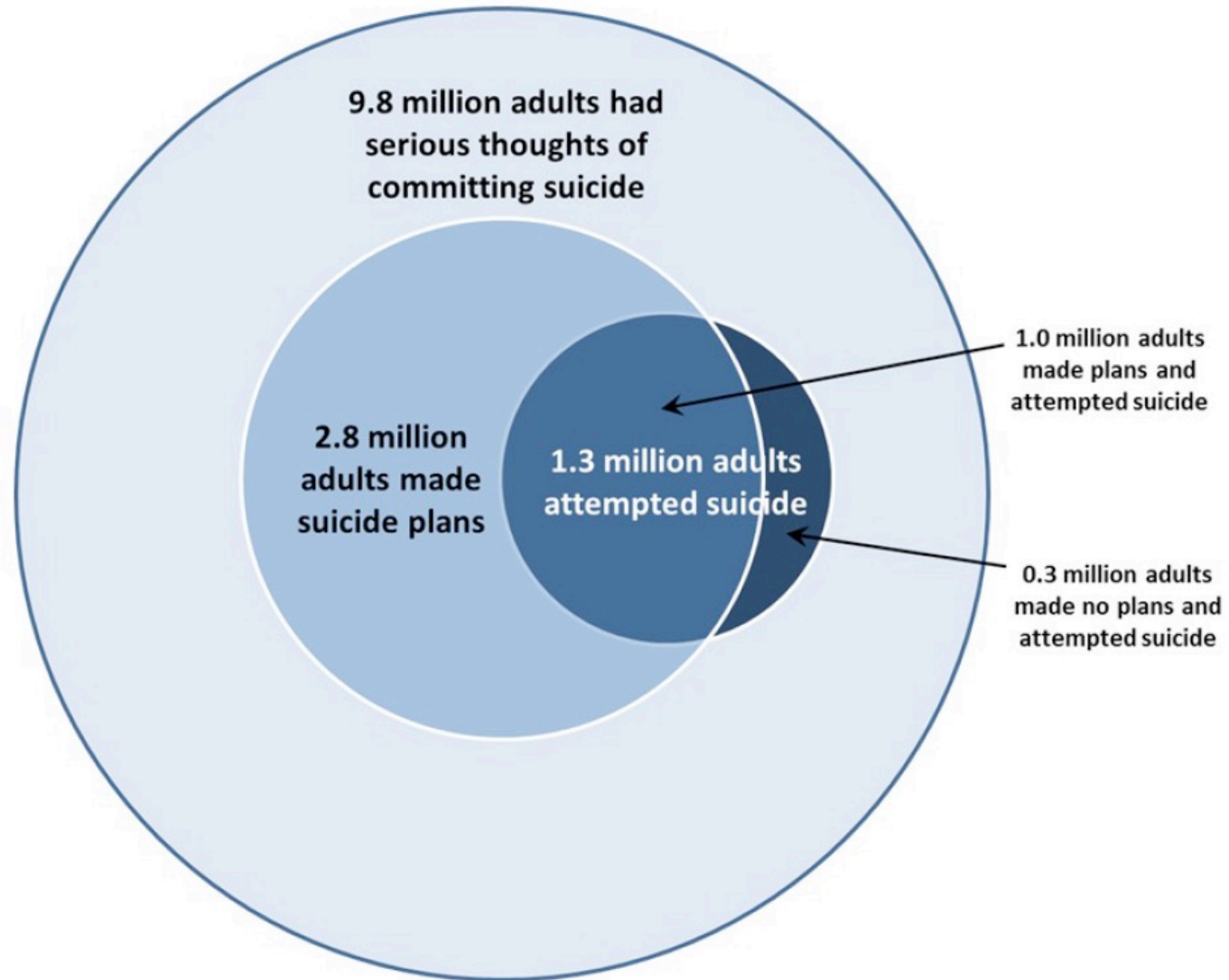


Why Study Suicidal Ideation and Planning?

- Studies of suicide rely on vital statistics data that don't include much information about decedents
- Suicidal ideation is associated with suicide attempts
- A better understanding of the correlates of suicidal ideation and planning could help prevent suicide

Past Year Suicidal Thoughts and Behaviors Among U.S. Adults (2016)

Data Courtesy of SAMHSA



DATA

- 2010-2016 National Survey on Drug Use and Health
- Conducted by SAMHSA
- Nationally representative sample of approximately 43,000 adults (18 years and older) annually

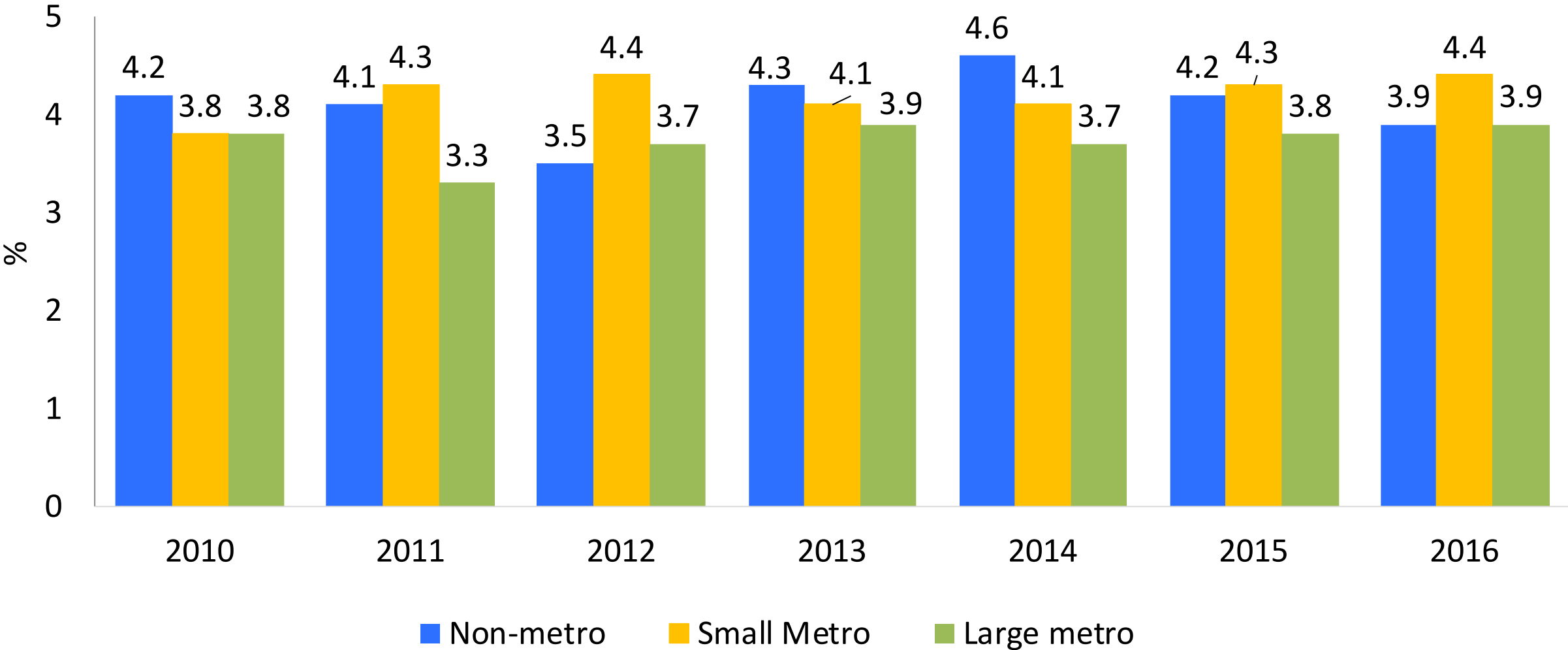
Suicidal Ideation, Planning, and Attempts

- Suicidal ideation
 - “At any time in the past 12 months, that is from [date fill] up to and including today, did you seriously think about trying to kill yourself?”
- Suicidal planning
 - If a yes response to ideation,
“During the past 12 months, did you make any plans to kill yourself?”
- Suicidal attempt
 - If a yes response to ideation,
“During the past 12 months, did you try to kill yourself?”

Analysis

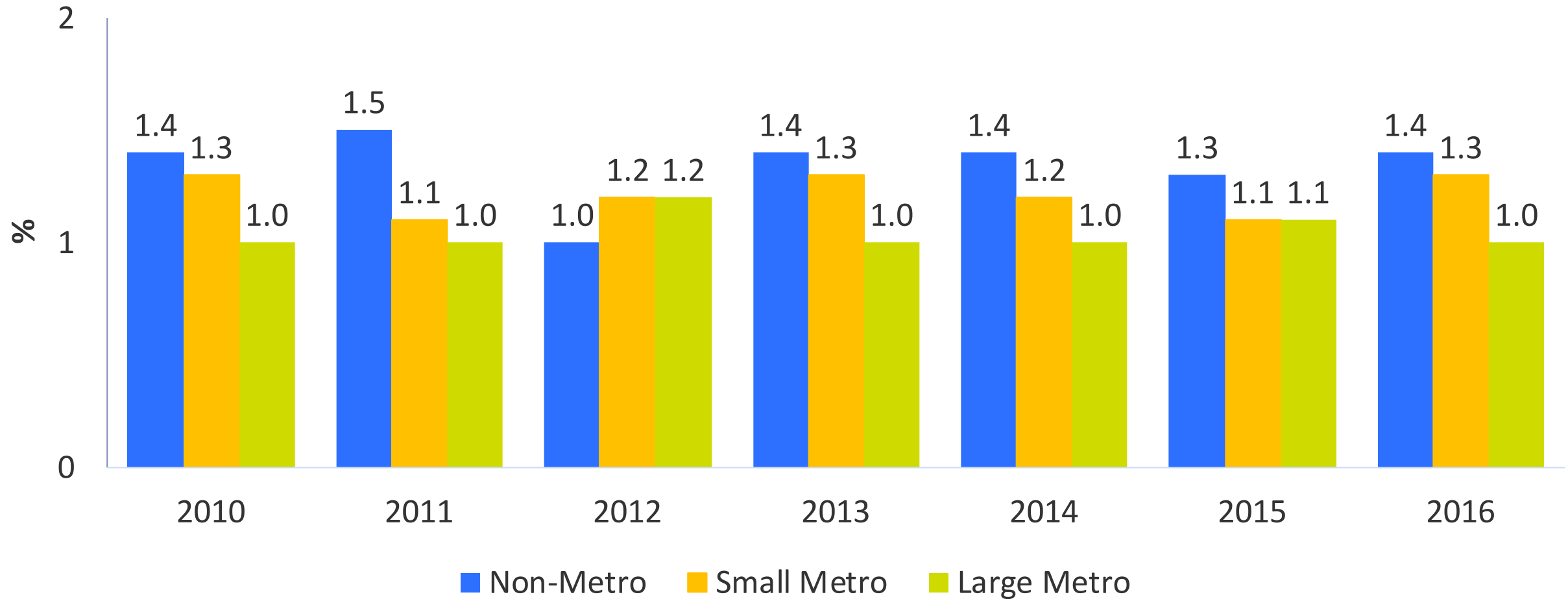
- Descriptive and bivariate analyses of suicidal ideation, planning, and attempts by metro status
 - Large metropolitan (MSA \geq 1 million)
 - Small metropolitan (MSA $<$ 1 million)
 - Non-metropolitan (outside standard MSA)
- Multivariate analysis of other correlates
- SAS survey procedures for complex sampling scheme and weights

Prevalence of Past-Year Suicidal Thoughts by County Type, 2010-2016



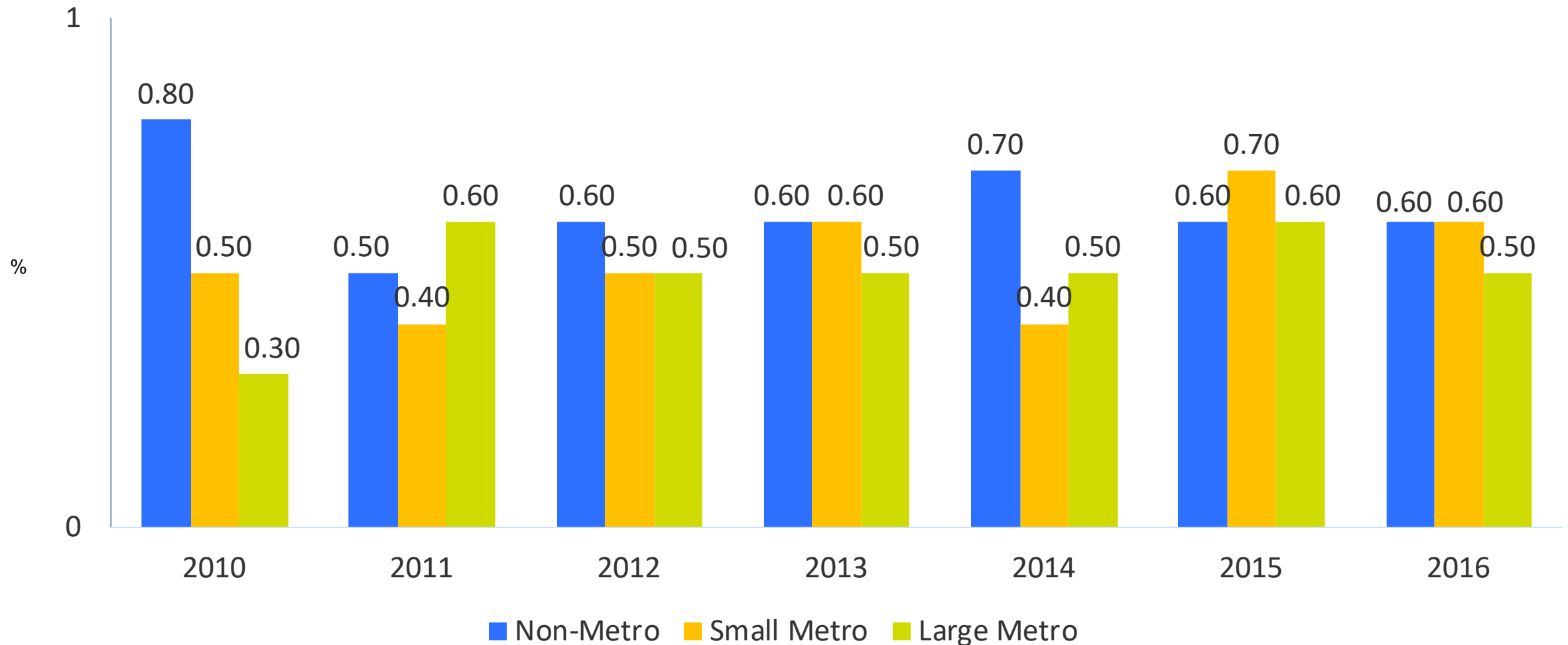
Overall mean prevalence of suicidal thinking from 2010-2016 higher ($P < .05$) among non-metropolitan and small metropolitan adults (4.1% and 4.2%, respectively) than large metropolitan adults (3.7%).

Prevalence of Past-Year Suicidal Plans by County Type, 2010-2016



Overall mean prevalence of suicidal plans from 2010-2016 varied significantly ($P < .001$) by county type and was highest among residents of non-metropolitan (1.3%) counties.

Prevalence of Past-Year Suicidal Attempts by County Type, 2010-2016



Significant ($P<.05$) Adjusted ORs

		Ideation	Plans	Attempts
Metro status (v. non-metro)	Large metro	-	-	0.59
	Small metro	-	-	-
Age (v. =>65)	18-25	-	2.12	-
	26-34	-	-	-
	35-49	-	-	-
	50-64	-	-	-
Race/ethnicity (v. Hispanic)	White	1.34	-	-
	Black/Afr Amer	-	-	-
	Nat Amer/AK Native	-	2.20	-
	Nat HI/Oth Pac Isl	3.96	-	-
	Asian	-	-	-
	Other race	2.01	-	-
Education (v. college grad)	< high school	-	-	-
	High school grad	-	-	-
	Some college	1.32	-	-
Marital status (v. single)	Married	0.83	-	-
	Widowed	0.39	-	-
	Divorced/separated	0.98	-	-
Income (v. =>\$75,000)	<\$20,000	1.02	-	-
	\$20,000-\$49,999	-	-	-
	\$50,000-\$74,999	-	-	-

Significant ($P < .05$) Adjusted ORs

		Ideation	Plans	Attempts
Unmet Mental Health Care Tx Needs (v. no)		2.42	1.74	1.44
Health insurance (v. no)		0.79	-	-
Overall health (v. fair/poor)	Excellent	0.48	0.53	0.53
	Very good	0.59	0.61	0.50
	Good	0.69	0.66	0.50
Psychiatric distress (v. no)		5.80	7.04	6.26
Major depressive disorder (v. no)		3.91	4.14	2.83
Alcohol use disorder (v. no)		1.59	1.39	1.71
Past year drug use (v. no)	Cocaine	-	-	-
	Crack	-	-	-
	Heroin	-	-	-
	Hallucinogen	-	-	-
	LSD	-	-	-
	Ecstasy	-	-	-
	Meth	-	-	-
	Oxycontin	-	-	-
	Stimulant	-	-	-

Conclusions and Potential Implications

- Rates of suicidal planning and ideation are higher among non-metropolitan than large metropolitan adults
- Mental health needs are strong correlates of suicidal ideation, plans, and attempts
 - Policies and programs increasing access to mental health Tx, which might also reduce substance use

Citation and Acknowledgments

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