

Changes in outcomes of local policy, school, and community activities before and after the shutdown of the Minnesota Youth Tobacco Prevention Initiative

Nina L. Alesci, Ph.D., M.P.H.; Jean L. Forster, Ph.D., M.P.H.; and Darin J. Erickson, Ph.D.

Division of Epidemiology and Community Health, School of Public Health, University of Minnesota

Background: Minnesota's 1998 settlement with the tobacco industry funded the Minnesota Department of Health to lead the Minnesota Youth Tobacco Prevention Initiative (MYTPI).

From 2000 to 2003, the state dedicated \$16 to \$18 million per year to preventing smoking among 12 to 17 year olds.



Through statewide programs and local grants, the MYTPI aimed to implement the following activities at the local level:

- policy action,
- school-based prevention, and
- community mobilization.

In 2003, a budget shortfall led the legislature to drastically cut tobacco control funding to \$3.7 million yearly.

Research Questions:

- Did the MYTPI successfully achieve its desired short-term outcomes across the state?
- Which, if any, were sustained after the MYTPI shutdown?

Study Design: MACC is a population-based, observational cohort.



Sample: The study sampled 60 of 129 Minnesota geopolitical units (GPUs) signifying local communities and 3,636 youth nested in these GPUs.

Data collection: Variables measured environmental influences on youth smoking, i.e. MYTPI's short-term outcomes. City and county measures were transformed to the GPU-level.

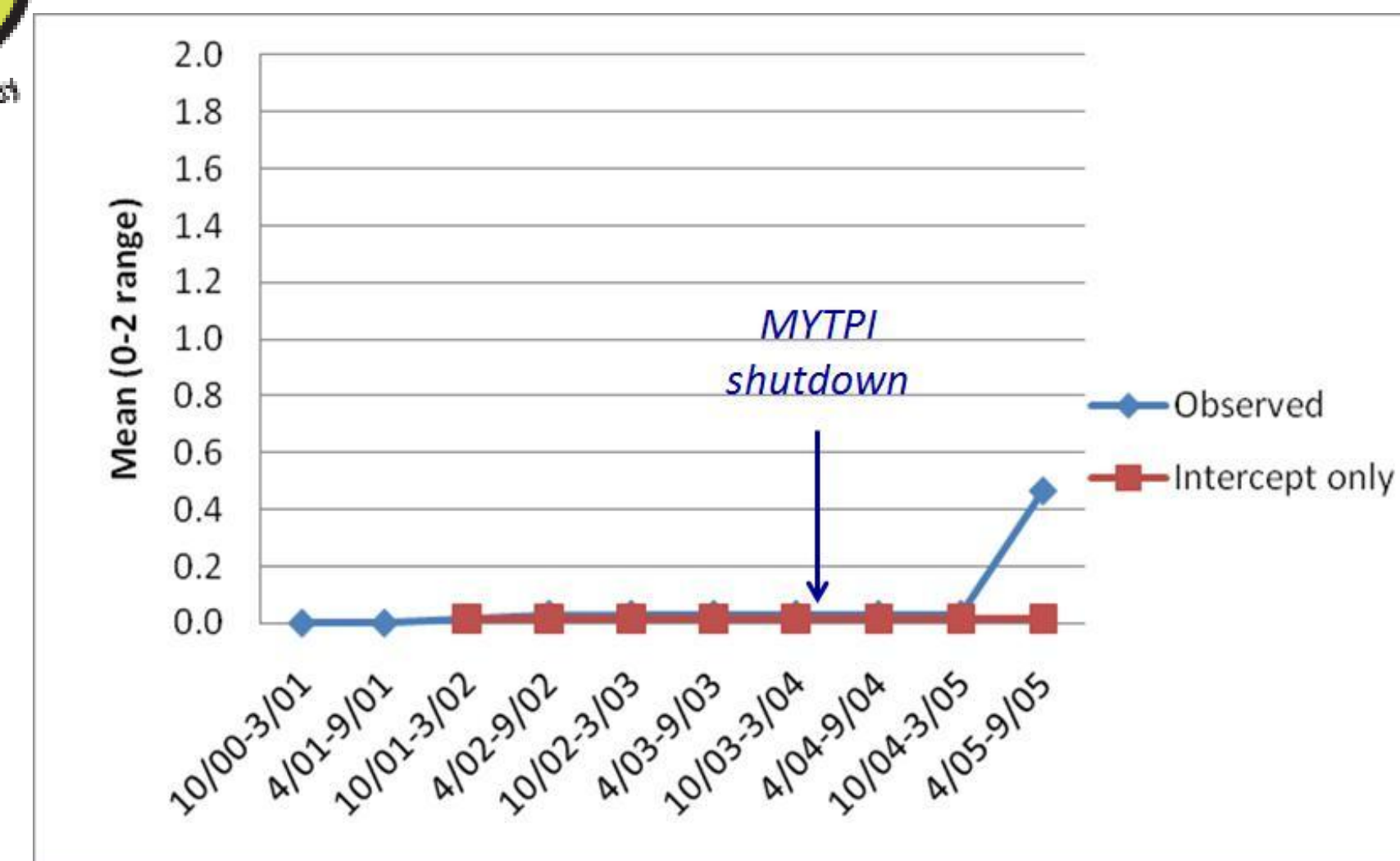
Data source	Frequency (2000-2005)	Level of data collection
Ordinance database	Annual	City/county
Enforcement survey	Annual	City/county
School survey	Annual	City/county
Youth survey	Every 6 months	Individual

Analysis: For each outcome, four latent curve models of the average growth trajectory from 2000 to 2005 were tested to select the best-fitting:

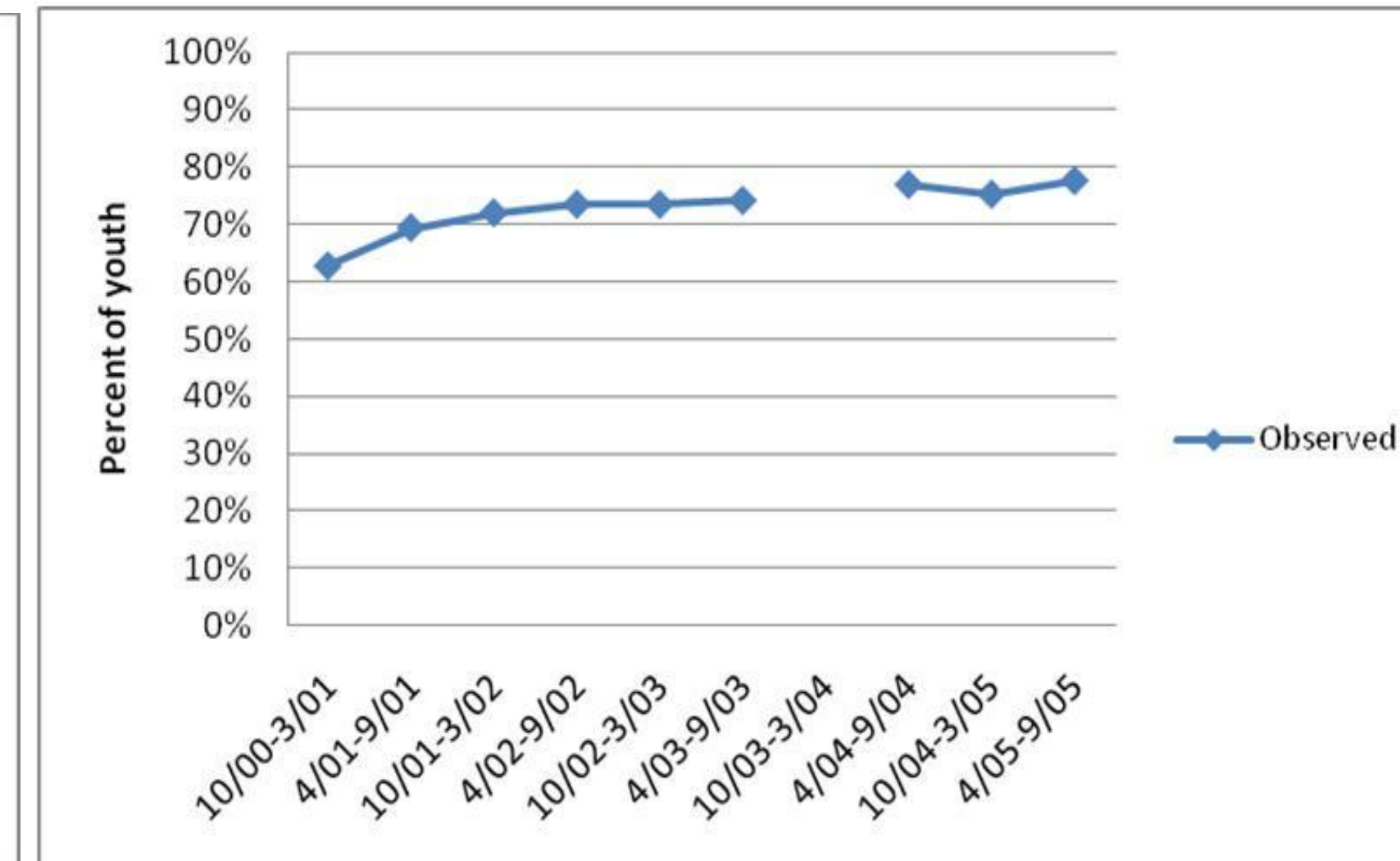
- 1) *intercept-only*, or no change,
- 2) *linear*, or uniform change,
- 3) *quadratic*, or curvilinear change, and
- 4) *piecewise linear*, or change at the 2003 MYTPI shutdown.

Results (selected):

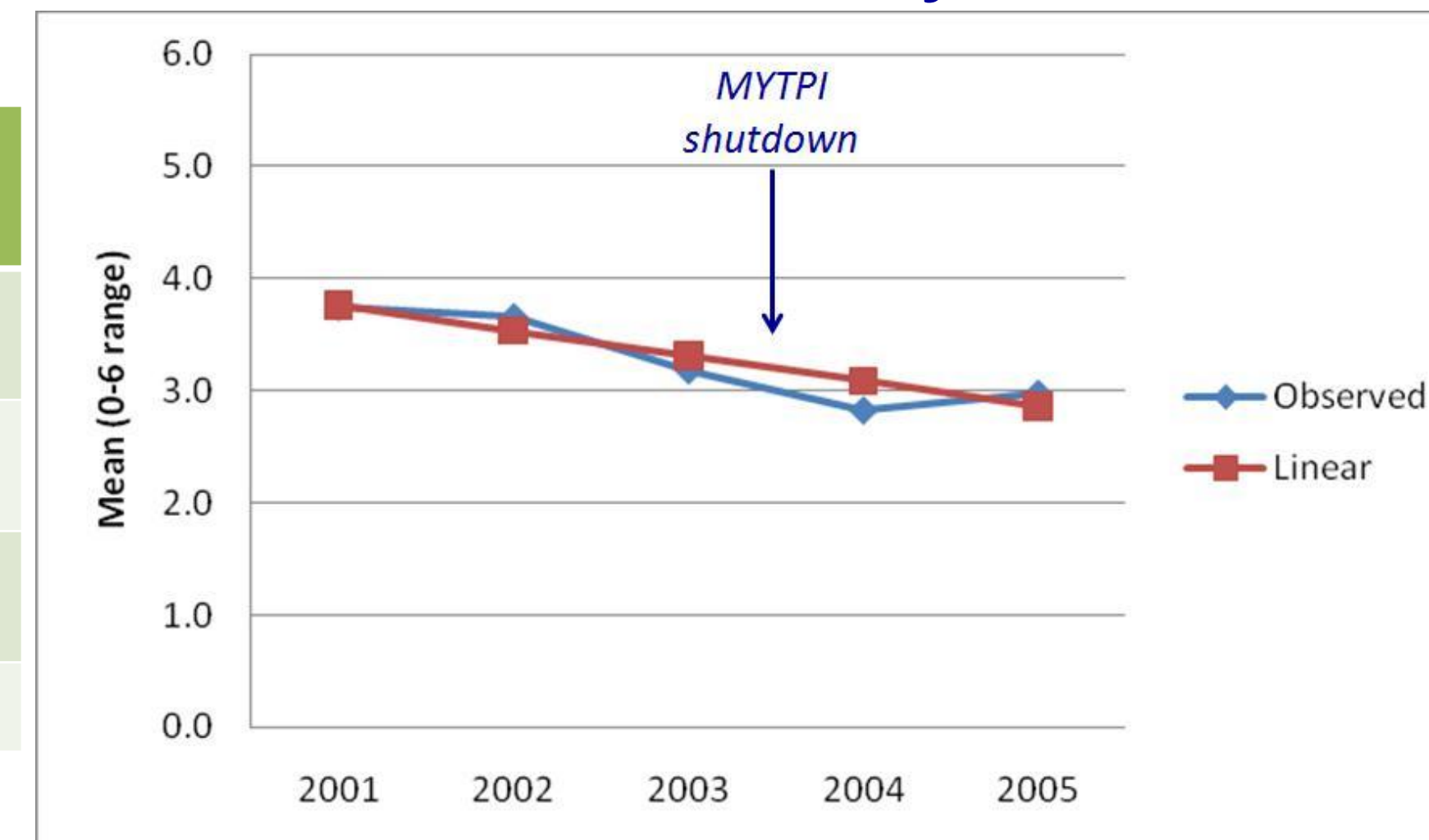
Policy action: Secondhand smoke indoor ordinance strength



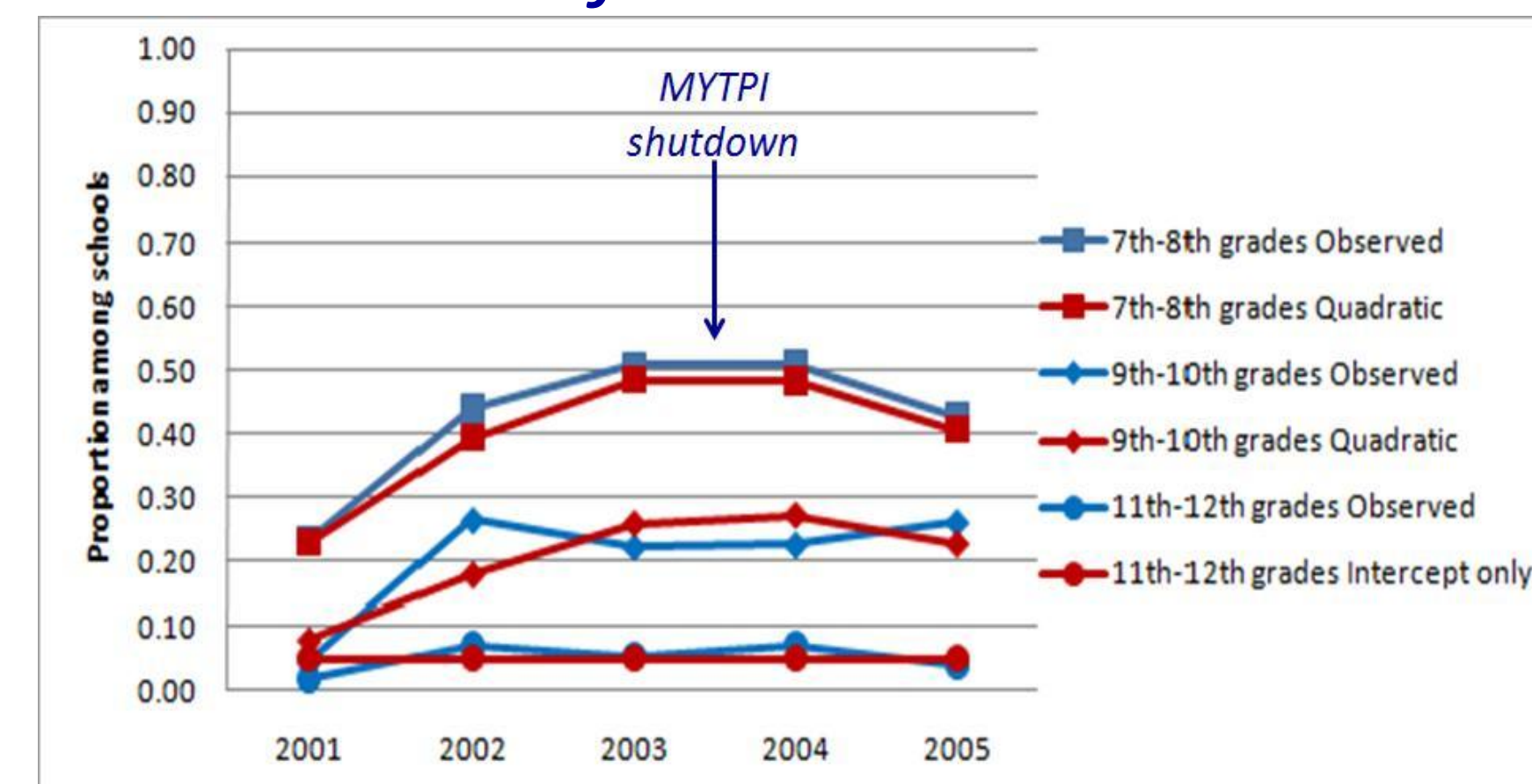
Community mobilization: Home smoking bans



Policy action: Youth access law enforcement



School-based prevention: Proven curricula from trained teachers



Conclusion:

Local short-term outcome type	During MYTPI (2000-03)	After MYTPI shutdown (2004-05)
Policy Action	Very little (YA enforce ↓)	Stable (YA enforce ↓)
School-based prevention	↑	Slowed
Community mobilization	↑	Slowed / gone

Discussion:

- MYTPI successfully implemented less controversial educational and community-mobilization strategies.
- Such resource-driven outcomes were not sustained after the funding cut.
- MYTPI was less successful in realizing permanent policy change.