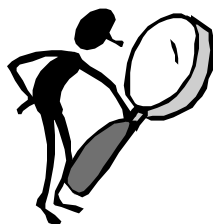


# The Youth Tobacco Evaluation Project (YTEP)

PI: Diane B. Wilson, Ed.  
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## Methods



## Methods

- Purpose

- Design and implement a comprehensive evaluation of state-wide tobacco prevention programming

- 62 agencies implemented 35 prevention programs

- Parental notification (passive consent) of 6<sup>th</sup>-12<sup>th</sup> graders



## VTSF Compendium Criteria

- Program's targeted audience is youth K-12
- Tobacco Prevention or Control component
- Focus on social skills, empowerment
- Recognized by
  - at least one national agency (e.g., SAMHSA, CDC)
  - or by one of the following state agencies: State Tobacco Control agencies, State Dept of Education, or State Health Services.
- Program publicly available, cost-effective
- Programs are at least 5 sessions with F-U activity
- Has an evaluation component, proven effective

## VTSF Compendium Programs (N = 35)

All Stars Families In Action Life Skills Training Project Charlie  
Strengthening Families Al's Pals Get Real About Tobacco Living Free of  
Tobacco (LIFT) Project Toward No Tobacco Use Too Good For Drugs  
Creating Lasting Families Helping Teens Stop Using Tobacco (TAP)  
Not On Tobacco Project Toward No Drug Use Dare To Be You Here's  
Looking At You Personal/Social Skills Lessons Science, Tobacco &  
You Ending Nicotine Dependence Intervening With Teen Tobacco  
Users (TEG) Positive Action Skills For Adolescence Families &  
Schools Together Know Your Body Project Alert Skills For Growing  
Anti-Tobacco Media Blitz NICoteen Tar Wars Cool School Skills For  
Action Teens Tackle Tobacco Keep A Clear Mind Smokeless School  
Days Youth Media Network

## Measurement

- Anonymous survey (~100 items) mailed to YTEP
  - Linking scheme
- Baseline, post-intervention, F-U, long-term F-U (2002-2004)
- CDC's Youth Risk Behavior Surveillance Survey and the Goals for Health Project (Meyer et al., 2000)
  - Characteristics of participants
  - Tobacco knowledge and attitudes
  - Tobacco use and exposure
  - Peer tobacco use
  - Access to tobacco products
  - Exposure to tobacco prevention messages
  - Other health habits



# Overview of the Evaluation

## Process Tools

<b>Instructor Survey</b>	<b>Brief Survey (4<sup>th</sup> &amp; 5<sup>th</sup> grade)</b>	<b>Parent &amp; Family Participant Survey</b>
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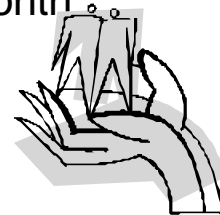
## Outcome Tools (6<sup>th</sup>-12<sup>th</sup> grades)

<b>Baseline Survey</b>	<b>Follow-up Survey</b>
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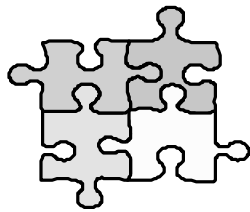
\* While we refer to grade groups we mean comparable age groups

# Overall YTEP Sample

- Over 25,000 baseline surveys
  - 19,360 MS and 5,780 HS
- 83% Post-tx, 13% F-U, 4% Long-term F-U
- 50/50% girls and boys
- At least one cigarette in past month
  - MS 7.5%
  - HS 27.5%



# Findings



## Overall Outcomes from 13 Programs (11/04 Report)

	MS+	MS-	HS+	HS-
Knowledge	8	2	4	
Benefits	1	2	1	1
Self-Efficacy		3	1	
Intentions	1	6	1	2
Use		3	1 (NOT)	

**MS:** Best: Anti-Tobacco Media Blitz; Worst: Get Real About Tobacco

**HS:** Best: NOT, Skills for Adol., Champs; Worst: Get Real, Skills for Service

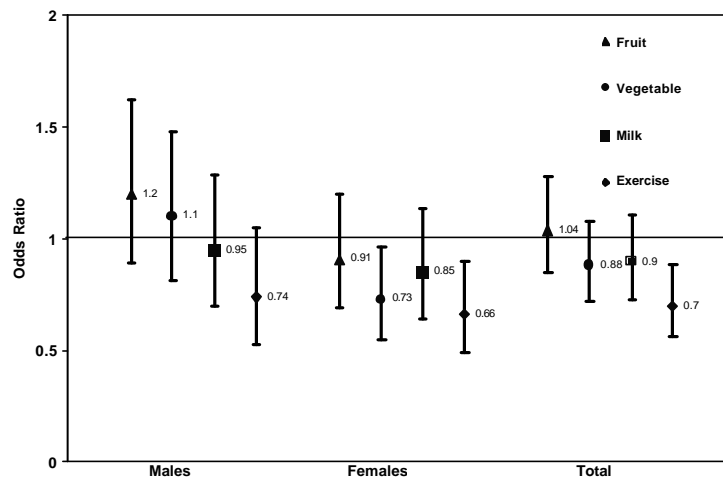
## Differences in food intake and exercise by smoking status (Wilson et al\*)

- MS sample: Male 49%, Female 51%
- HS sample: Male 47%, Female 53%
- In MS female, HS female and total HS sample, smokers were significantly less likely to eat =1 serving/day of vegetables than non-smokers.
- Both MS female and total MS sample smokers were significantly less likely than non-smokers to exercise =3x/week.
- Smoking is associated with poorer dietary and exercise habits. This is especially true for girls.

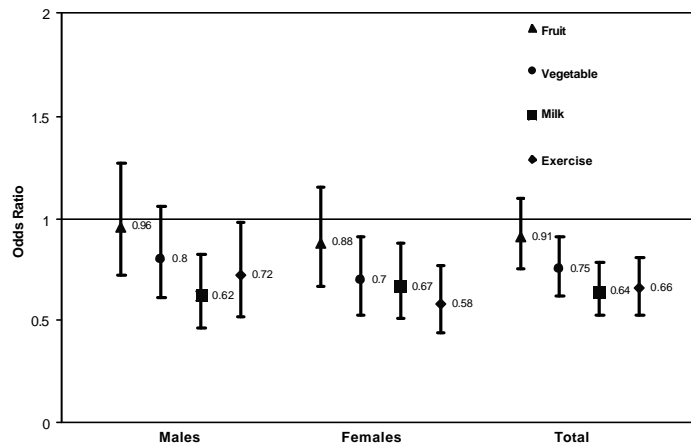


\**Preventive Medicine, 2005*

### Gender comparisons of food consumption and exercise frequency in **Middle School** smokers



## Gender comparisons of food consumption and exercise frequency in **High School** smokers

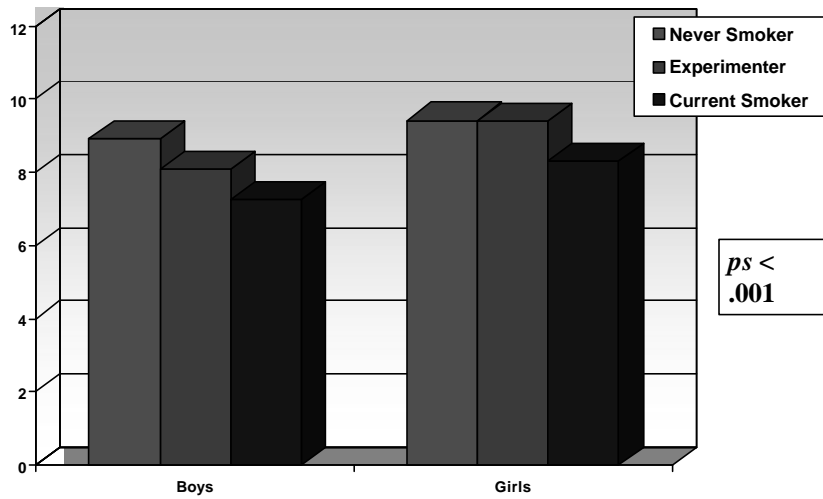


## Adolescent attitudes toward smoking and weight loss (Bean et al.)

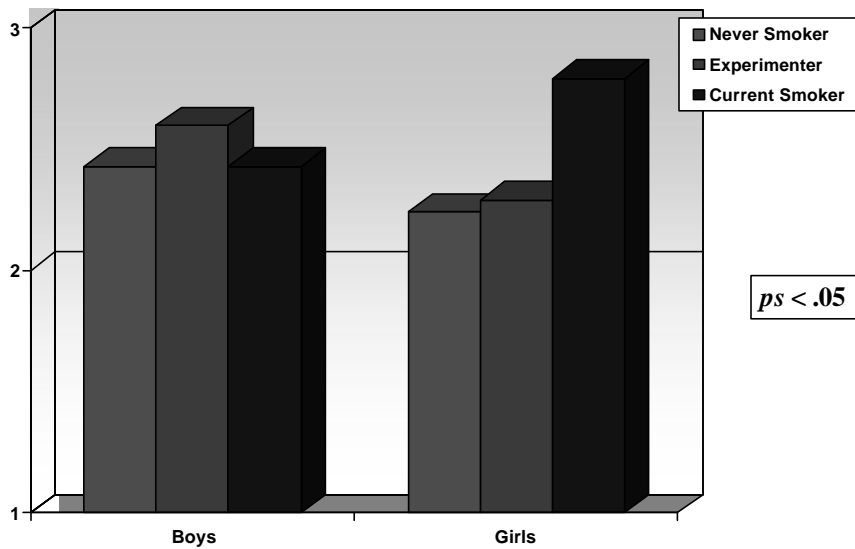
- 750 students from rural high schools
- 54% female, 46% male
- Both boys and girls endorsed the attitude that smoking helps with weight control
  - More girls think people smoke for weight control
  - More boys think they will gain if they don't smoke
- In full logistic regression, attitudes similarly predict smoking status across gender
- Current smokers report lower endorsement of weight control but higher endorsement of personal weight gain
- Smoking appears to be a weight control strategy associated with initiation and maintenance



**Gender differences in attitudes that people smoke for weight control by smoking status (3 items).**



**Gender differences in item, "If I stay tobacco-free, I will gain weight" by smoking status.**



# Smoking and Closeness to Parents

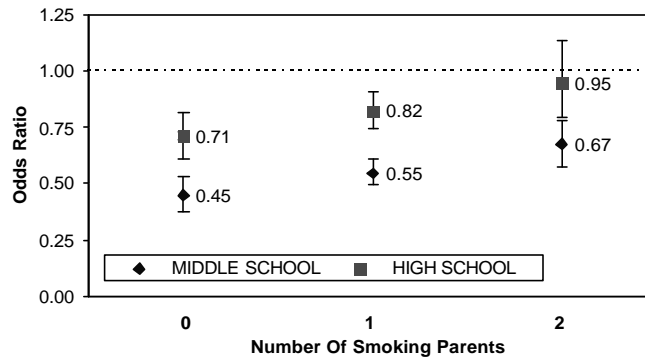
(Wilson et al.)

- MS (n=17, 468) and HS (n=5,457) students
- 4 measures of closeness to parents
  - Time, dinner, communication, closeness
- Students who were less close to parents had significantly increased odds of smoking.
- Number of parents smoking (0, 1, 2) incrementally moderated the protective effect of closeness to parents in predicting youth smoking.
- Greater emphasis on both addressing parent smoking and strengthening family relationships may be necessary to further reduce youth smoking in the US.

## Odds ratios assessing the association between youth smoking and closeness to parents

	Dinner		Time		Communication		Closeness	
	MS	HS	MS	HS	MS	HS	MS	HS
Main Effect		.86	.60					.69
Moderated Effect								
0 Parents smoke	.79			.55	.45	.71	.40	
1 Parent smoke	.84			.63	.55	.82	.45	
2 Parents smoke	.90			.73	.67	.95	.51	

## ORs and CIs assessing the association between youth smoking and communication with parents



Note: Adjusted analysis; non-smokers referent category. Covariates include smoking siblings, family structure, gender, ethnicity, and parental smoking. When the interaction term communication with parents x parent smoking was significant, odds ratios were presented separately for 0, 1, or 2 parents smoking. Odds ratios below 1.0 indicate decreased odds of youth smoking by unit of closeness to parents.

## Perceived access to cigarettes among middle school youth (Obando, Speizer, et al.)

- 5451 Boys (49%), 5568 Girls (51%)
- Males significantly more likely to perceive cigarettes easy to get at school and store ( $p$ s < .001); females think easier at home ( $p$  < .01)
- Significance for males only (logistic regression)
  - Home: males who think their parents have positive attitudes toward smoking perceive cigarettes easier to get at home; males in higher grades perceive access easier
  - School: the more important it is to try hard at school, the lower perceived access
  - Store: lower maternal education associated with access; less access if living with dad, then mom, then both
- Less influence over girls' access?

## Rural/urban differences in MS tobacco use (Jones et al.)



	Rural Growers (n=1919)	Rural Non-Growers (n=6459)	Urban Non-Growers (n=1806)	p-value
<b>CIGARETTE USE*</b>				
Ever smoke (%)	20.4	22.9	19.5	0.002
Current smoker (%)	10.4	12.1	10.3	0.018
Smoke pack per day (%)	1.3	1.9	1.3	0.018
<b>CHEWING TOBACCO/SNUFF USE*</b>				
Ever chew/snuff (%)	15.6	12.7	7.9	<0.0001
Tried chew/snuff before age 9 (%)	4.2	3.4	2.2	0.001
<b>OVERALL TOBACCO USE*</b>				
Smoke <b>OR</b> chew tobacco/snuff (%)	28.1	28.5	23.4	<0.0001
Smoke <b>AND</b> chew tobacco/snuff (%)	8.8	8.1	4.7	0.0005

\*Adjusted: gender, race, grade level

## Conclusions



## Summary/Conclusions



- Smoking appears to be a weight control strategy associated with initiation and maintenance
  - Smoking is associated with poorer dietary and exercise habits (especially among girls)
  - Attend to diet and weight concerns/management in interventions
- Number of parents smoking moderates protective effects of closeness
- Locale is an important variable in smoking and chewing
- We know more about boys' access and potentials for modification
- Limitations: No control group, program evaluation, self-report, survey fatigue, varied samples
- New VTSP proposal under review to intervene on smoking and diet in rural MSs with parent component (LIFT+)

## Other Papers in Progress



**Kim, H., Uguy, S., McClish, D., & Fries, E.** *Predictors of smokeless tobacco use in adolescents.*

McClish, D., Heckman, C., Wilson, D. B., Dahman, B., & Fries, E. *Planning to quit: Predictors of adolescent smokers' intentions at baseline.*

Mitchell, K., Bean, M., Speizer, I., Smith, B., Wilson, D. B., & Fries, E. *Gender and ethnic differences in the relationships among stress, social support and smoking.*

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