

# West Virginia Perinatal Partnership 2012 Study of Outcomes and Practices

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# 2009 Study Purposes

- What counties in West Virginia tend to have the most positive perinatal outcomes for teenage mothers and their babies?
- What educational practices and services are associated with positive perinatal outcomes in West Virginia?

## Counties Included in 2009 Study:

Hardy  
Jefferson  
Lewis  
Monroe  
Pleasants

# 2009 Cross County Comparison

- All 4\* Favorable Outcome counties addressed:
  - Female/male reproduction
  - Social pressure and influence
  - Contraception methods
  - Sexually transmitted infections (STIs) and diseases (STDs)
  - Planning and nutrition for a healthy pregnancy
  - Responsibilities of parenting
- 3 of 4\* Favorable Outcome counties addressed:
  - Sexual abuse
  - Effects of alcohol / tobacco / addictive drugs on a developing fetus
  - Self-efficacy for life skills

\*Note: Lewis County health teachers were not available for interviews

# 2009 Cross County Conclusions

- 2009 findings for counties with favorable outcomes:

## **Consistencies**

- Teacher credentials and experience
- School- and community-based health centers
- Teacher use of outside resources
- 3 of the 5 counties adopted the *Glencoe Health* textbook
- All 5 counties offer or have offered at least 2 of the 4 Family and Consumer Sciences (FACS) classes related to perinatal education.

## **Inconsistencies**

- Definition of a class unit

# 2012 Study Purposes

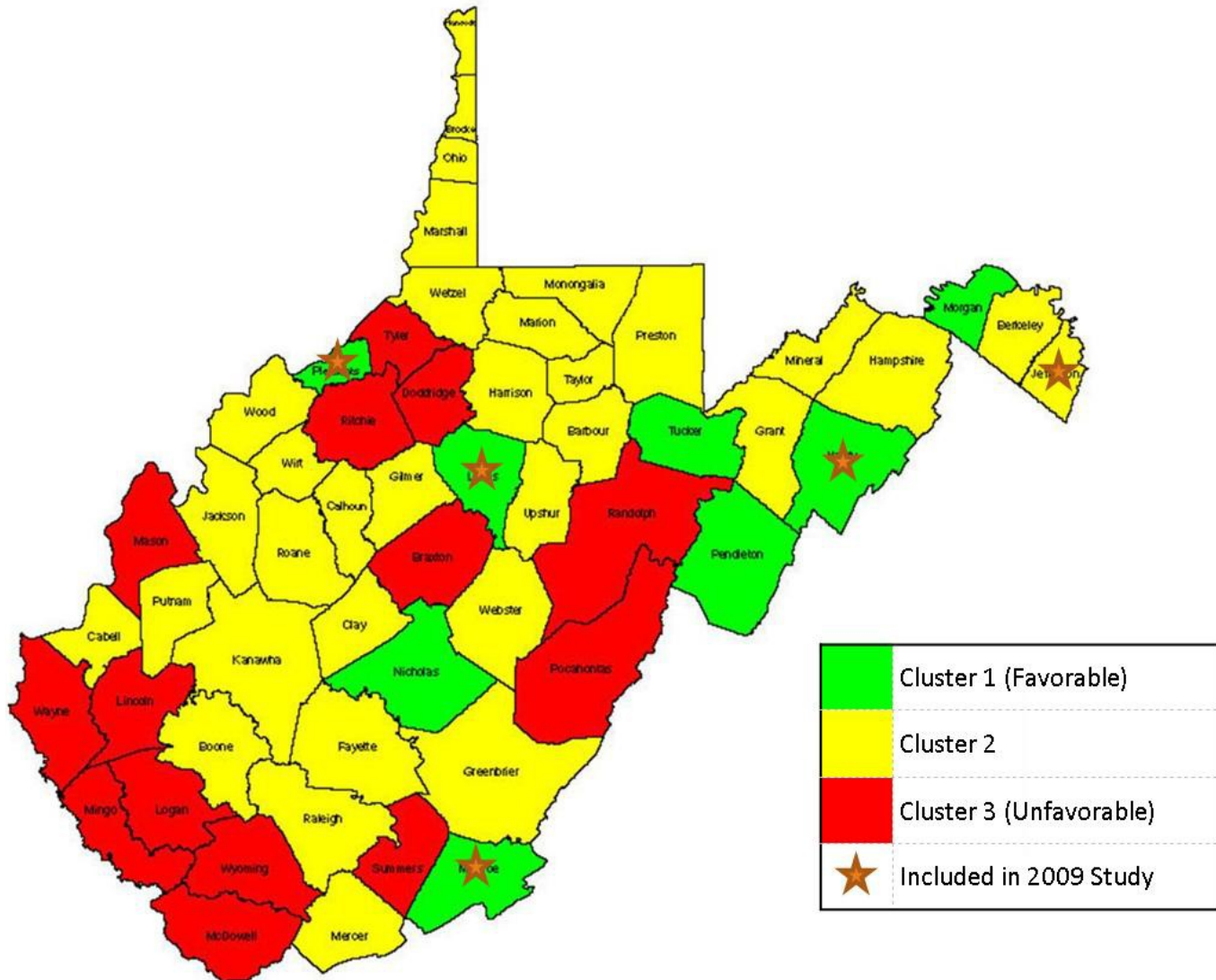
- What counties in West Virginia tend to have the most positive perinatal outcomes for teenage mothers and their babies, and what counties tend to have the most negative outcomes?
- What educational practices and services are associated with positive and negative perinatal outcomes in West Virginia?
- Describe the costs of teen childbearing, including the average amount of public funding per pregnancy.

# Phase 1

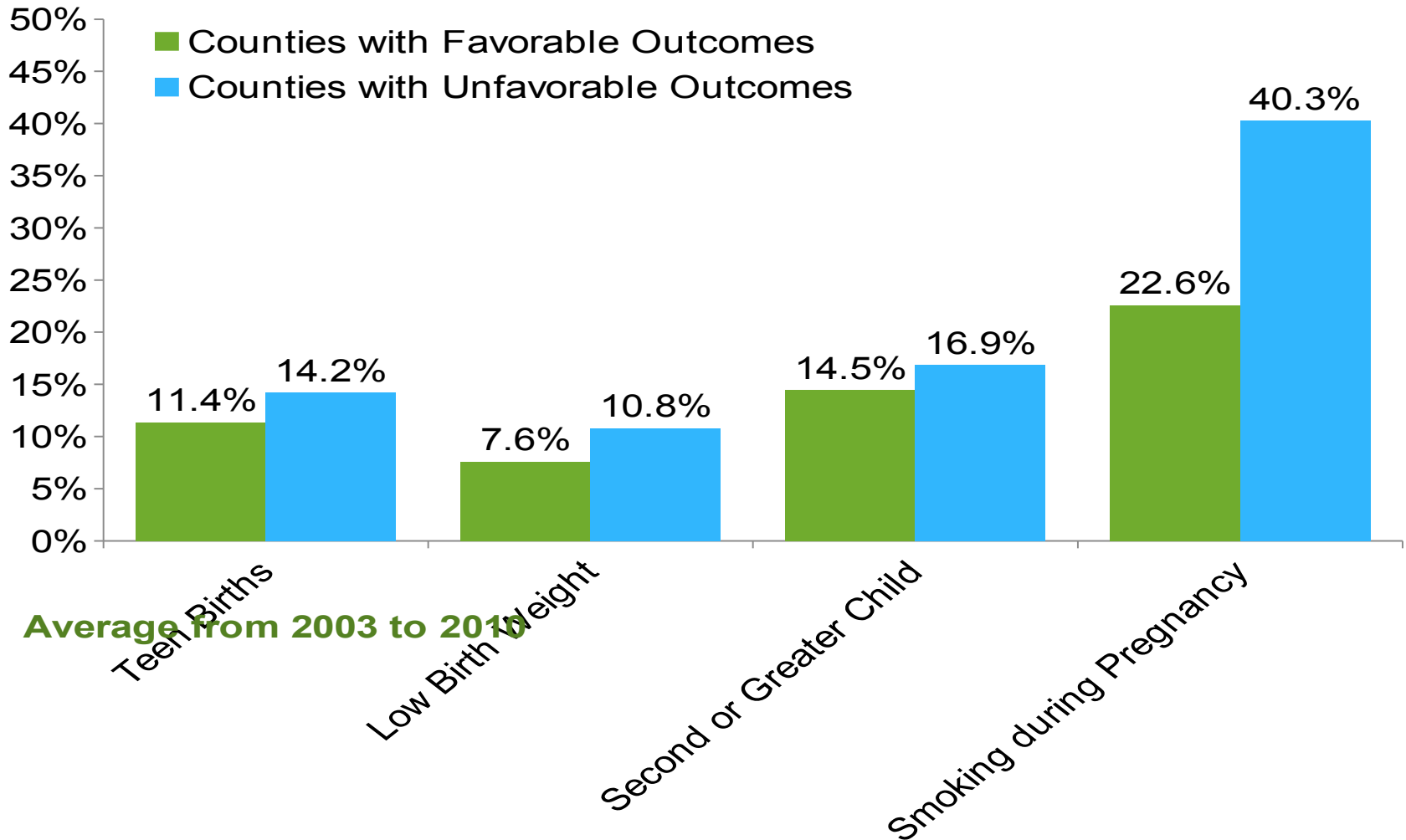
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Identify counties with favorable and unfavorable perinatal health outcomes

# County-Level Perinatal Outcomes



# Prevalence of Key Health Indicators





# Phase 2

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Identify educational practices and services in targeted counties

# Health Education Assessment Project (HEAP) – Growth & Development Scores

Level	Group	2007	2008	2009	2010	2011	2012	Avg.
Grade 6	FO	65.7	74.2	70.2	69.9	73.4	76.9	71.5
	UO	69.0	71.4	71.3	72.3	70.2	71.7	71.0
Grade 8	FO	78.3	76.5	68.7	74.8	77.1	78.6	78.5
	UO	78.0	71.8	72.9	73.7	69.3	72.2	72.5
High School	FO	81.8	80.0	76.8	77.2	76.3	74.6	77.2
	UO	76.4	73.8	73.4	74.3	73.6	70.1	73.4

FO = Favorable Outcomes; UO = Unfavorable Outcomes

# FACS Class Enrollment

FACS	Outcomes Group	2009-2012 Total	
		Sum	Avg./ County
Life Connections	Favorable	154	19.3
	Unfavorable	1,026	73.3
Parenting and Child Development	Favorable	700	78.5
	Unfavorable	2,613	186.6
Parenting and Strong Families	Favorable	157	19.6
	Unfavorable	289	20.6

# Health Center Access

Health Center Access	Favorable Outcomes		Unfavorable Outcomes	
	Sum	Avg./ County	Sum	Avg./ County
School-based Health Centers (SBHC)	10	1.25	9	0.64
Community-based Health Centers (CBHC)	5	0.63	8	0.57
Satellite Clinic (SC) Sites	6	0.75	8	0.57
Free Clinic (FC) Sites	0	0.00	2	0.14
<b>All Health Centers and Clinic Sites</b>	<b>21</b>	<b>2.63</b>	<b>27</b>	<b>1.93</b>

County	SBHC	CBHC	SC	FC	# of Center Types
Hardy	Yes	Yes	Yes	No	3
Lewis	No	No	No	No	0
Monroe	Yes	Yes	No	No	2
Morgan	No	Yes	Yes	No	2
Nicholas	Yes	No	Yes	No	2
Pendleton	Yes	Yes	Yes	No	3
Pleasants	Yes	No	No	No	1
Tucker	No	Yes	Yes	No	2
Braxton	No	No	No	No	0
Doddridge	No	No	No	No	0
Lincoln	Yes	Yes	Yes	No	3
Logan	Yes	Yes	No	Yes	3
McDowell	Yes	Yes	Yes	No	3
Mason	No	No	No	No	0
Mingo	No	No	Yes	No	1
Pocahontas	No	Yes	No	No	1
Randolph	No	Yes	No	No	1
Ritchie	Yes	Yes	No	No	2
Summers	No	No	No	No	0
Tyler	No	No	No	Yes	1
Wayne	Yes	No	Yes	No	2
Wyoming	No	Yes	Yes	No	2

# Adolescent Pregnancy Prevention Initiative (APPI) Presentations

Group		2007-2012 Total
Favorable Outcomes	Sum	216
	Avg./County	27
Unfavorable Outcomes	Sum	312
	Avg./County	22

# Right from the Start (RFTS)

Services	Outcomes Group	2007-2011 Total	
		Sum	Avg./County
Enrolled	Favorable	188	23.5
	Unfavorable	518	37.0
Enhanced	Favorable	10	1.3
	Unfavorable	2	0.1
Enhanced Only	Favorable	4	0.5
	Unfavorable	10	0.7

# West Virginia Prenatal Risk Screening Instrument (PRSI)

Reasons for Late Entry into Prenatal Care	Favorable Outcomes	Unfavorable Outcomes
Insurance Enrollment Delay	4.0%	2.2%
Financial	3.7%	1.5%
Transportation	0.0%	3.8%



# West Virginia PRSI

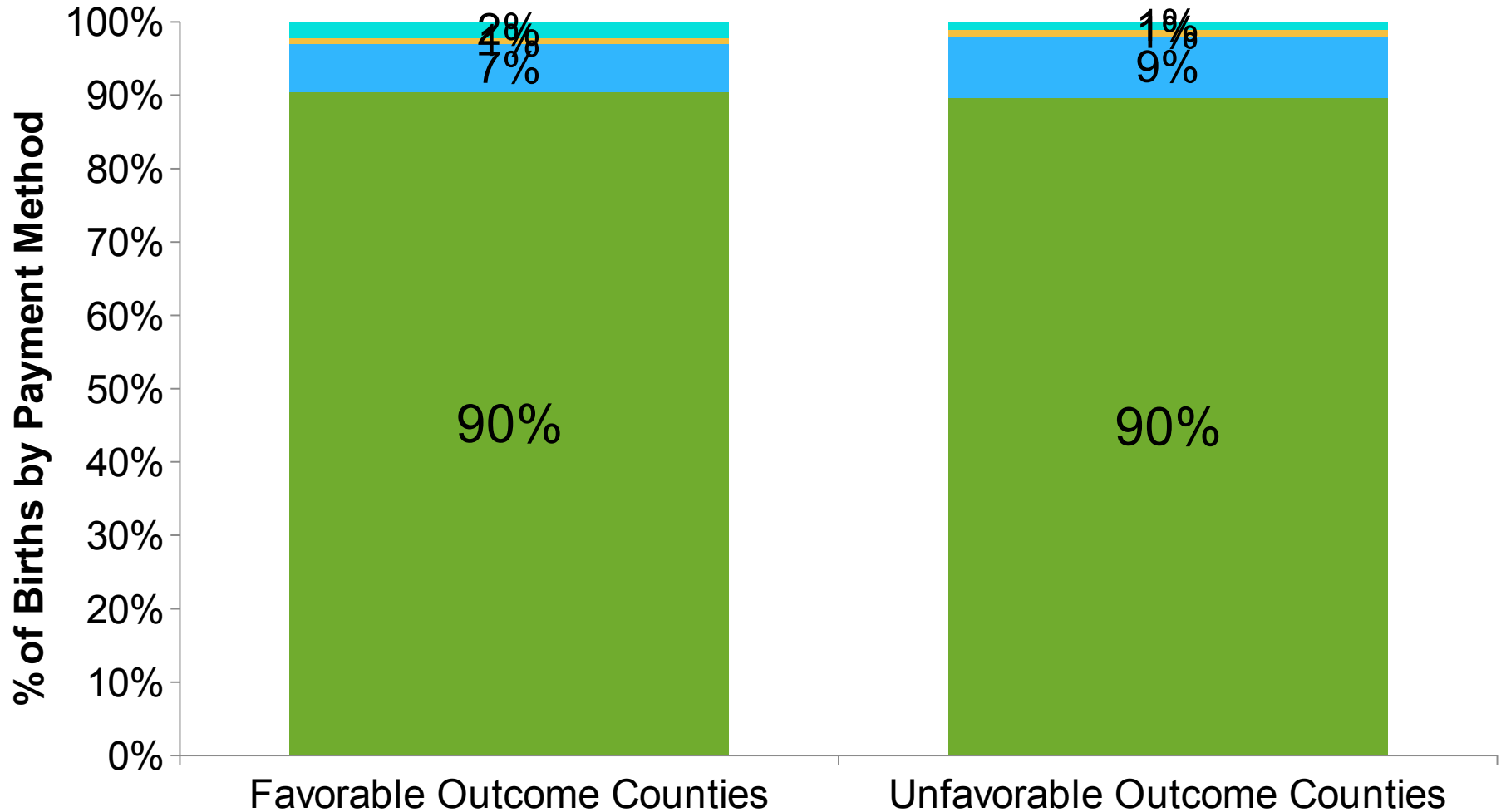
Psychosocial Risk Factors	Favorable Outcomes		Unfavorable Outcomes	
	Yes	No	Yes	No
Unplanned Pregnancy	59.5%	37.2%	56.8%	35.9%
Unemployed or Inadequate Income	46.2%	51.4%	45.4%	42.2%
Inadequate Transportation	6.2%	90.1%	9.2%	79.5%
Nutritional Concerns	1.8%	95.4%	5.3%	81.9%
Domestic Violence	0.4%	96.7%	3.9%	84.6%

# Birth Score Form

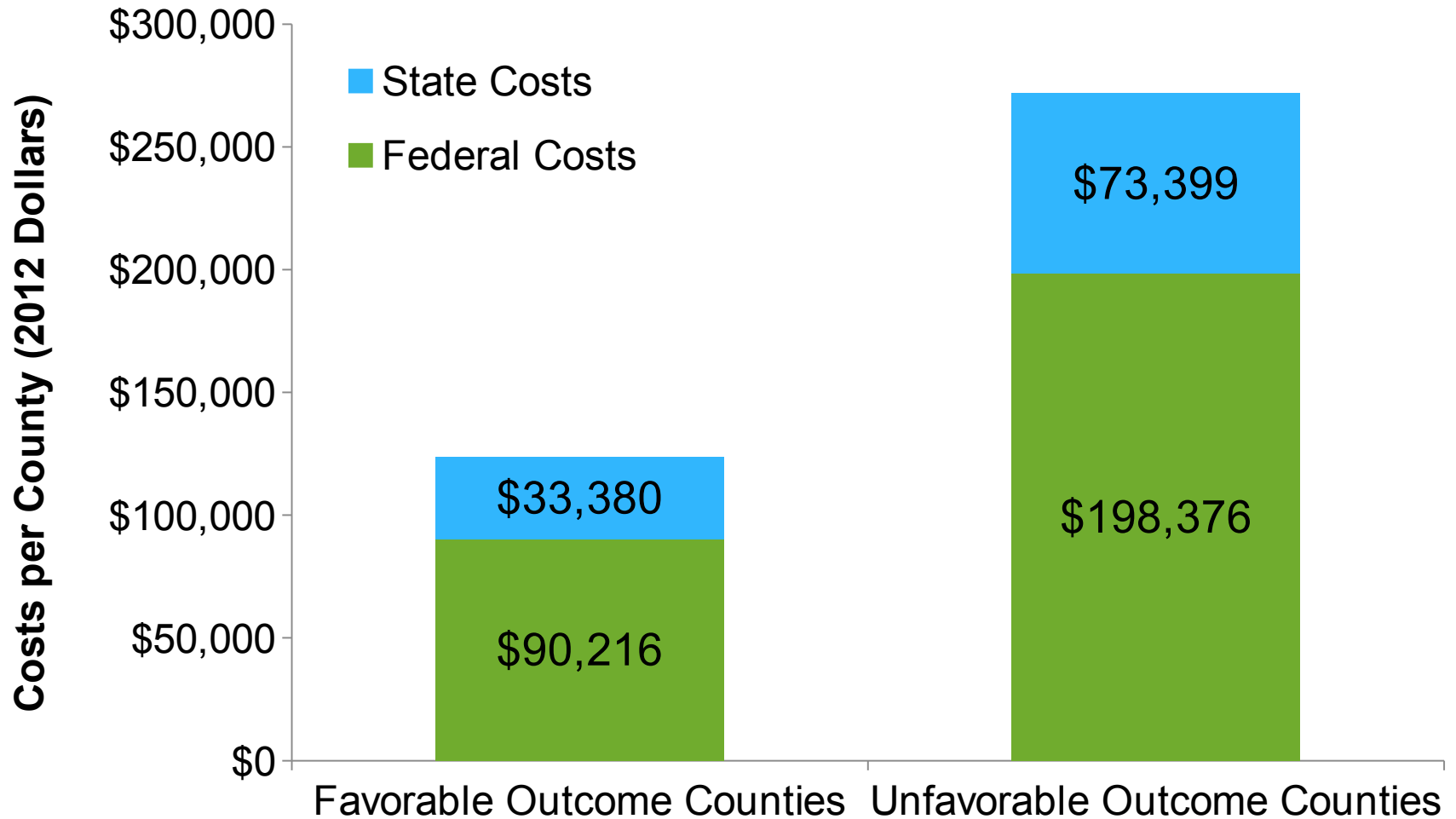
<b>Birth Score Form</b>	<b>Favorable (<i>n</i> = 593)</b>	<b>Unfavorable (<i>n</i> = 2,008)</b>
<b>Feeding Intention</b>		
<b>Breast Only</b>	47.6%	30.2%
<b>Bottle or Both</b>	52.4%	69.8%
<b>Nicotine Use During Pregnancy</b>		
<b>No</b>	68.1%	63.0%
<b>Yes</b>	31.9%	37.0%
<b>Other</b>		
<b>High Birth Score</b>	72.7%	77.9%
<b>Transferred to the Neonatal Intensive Care Unit (NICU)</b>	4.4%	6.4%

# Payment Source

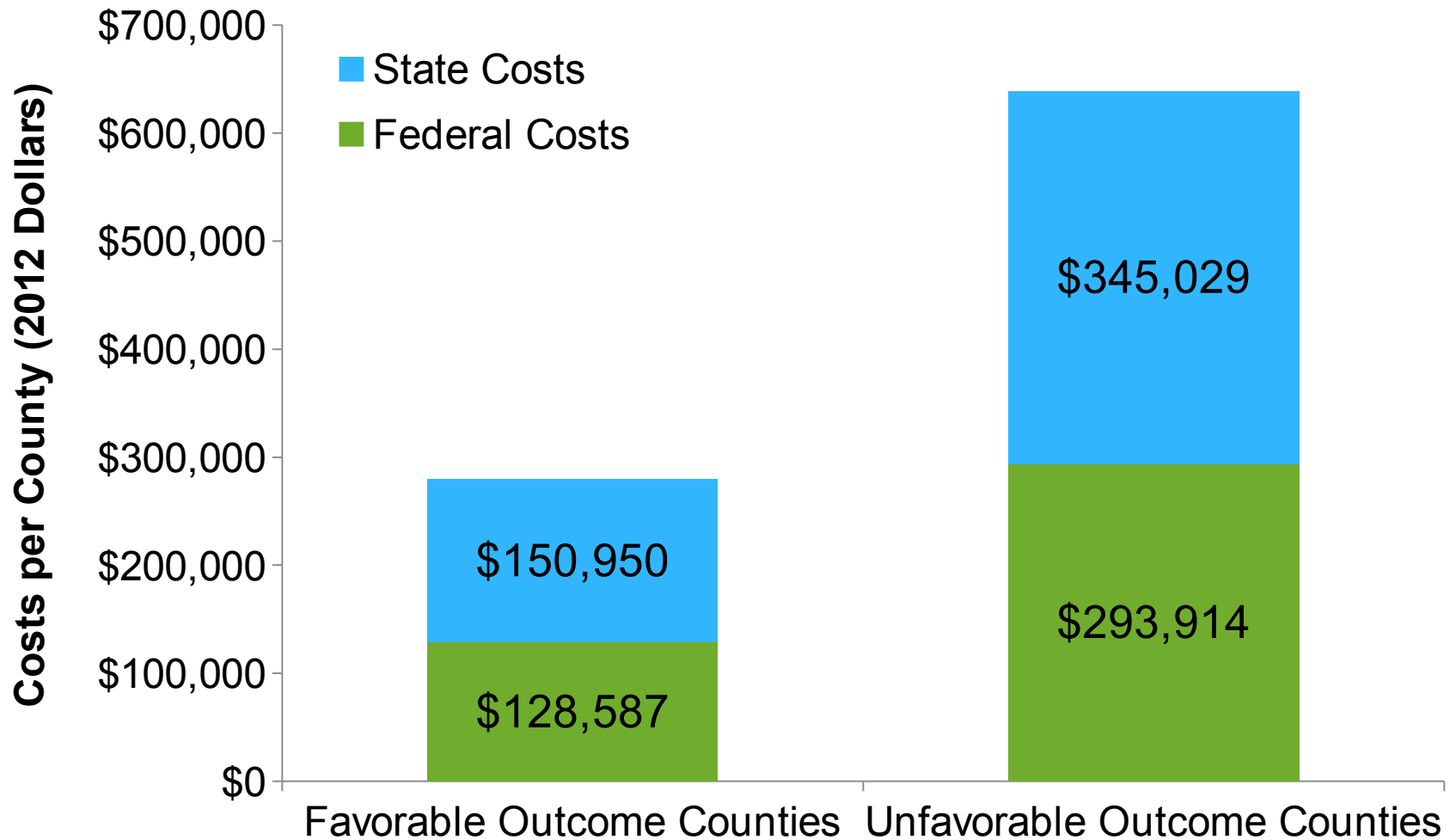
■ Other/Unknown ■ Self Pay ■ Insurance ■ Medicaid



# Costs of Publicly Funded Births



# Long-Term Costs of Teen Childbearing

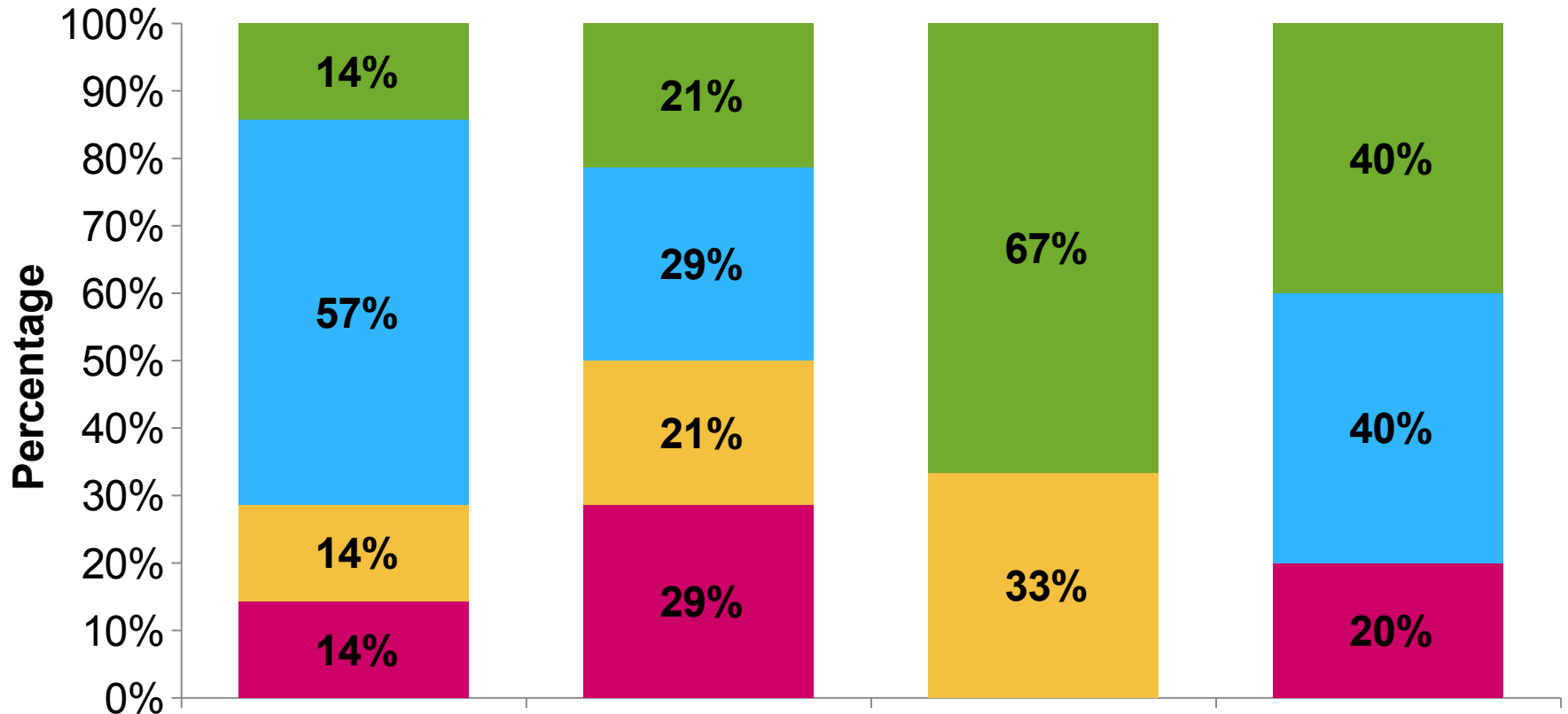


# Health Educators Survey

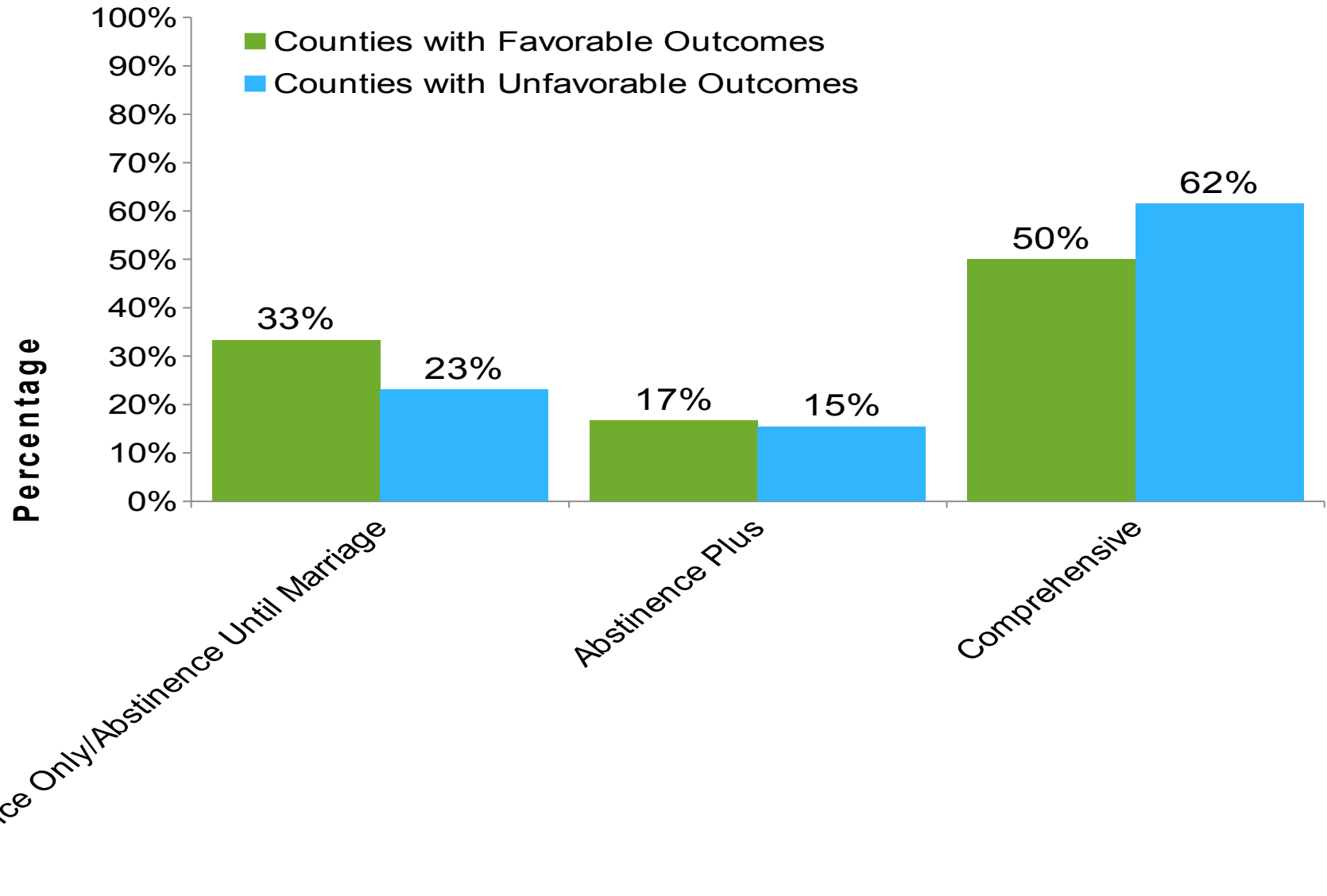
- Edvantia conducted an online survey in November and December 2012.
- Questions focused on health-related education curricula as implemented and the extent to which those curricula and classroom practices approximate identified best practices.
- 94 teachers were invited to participate in the survey, 35 responded, only 26 completed the entire survey.

# Standards and Guidelines

Very Familiar   Somewhat Familiar   Somewhat Unfamiliar   Very Unfamiliar

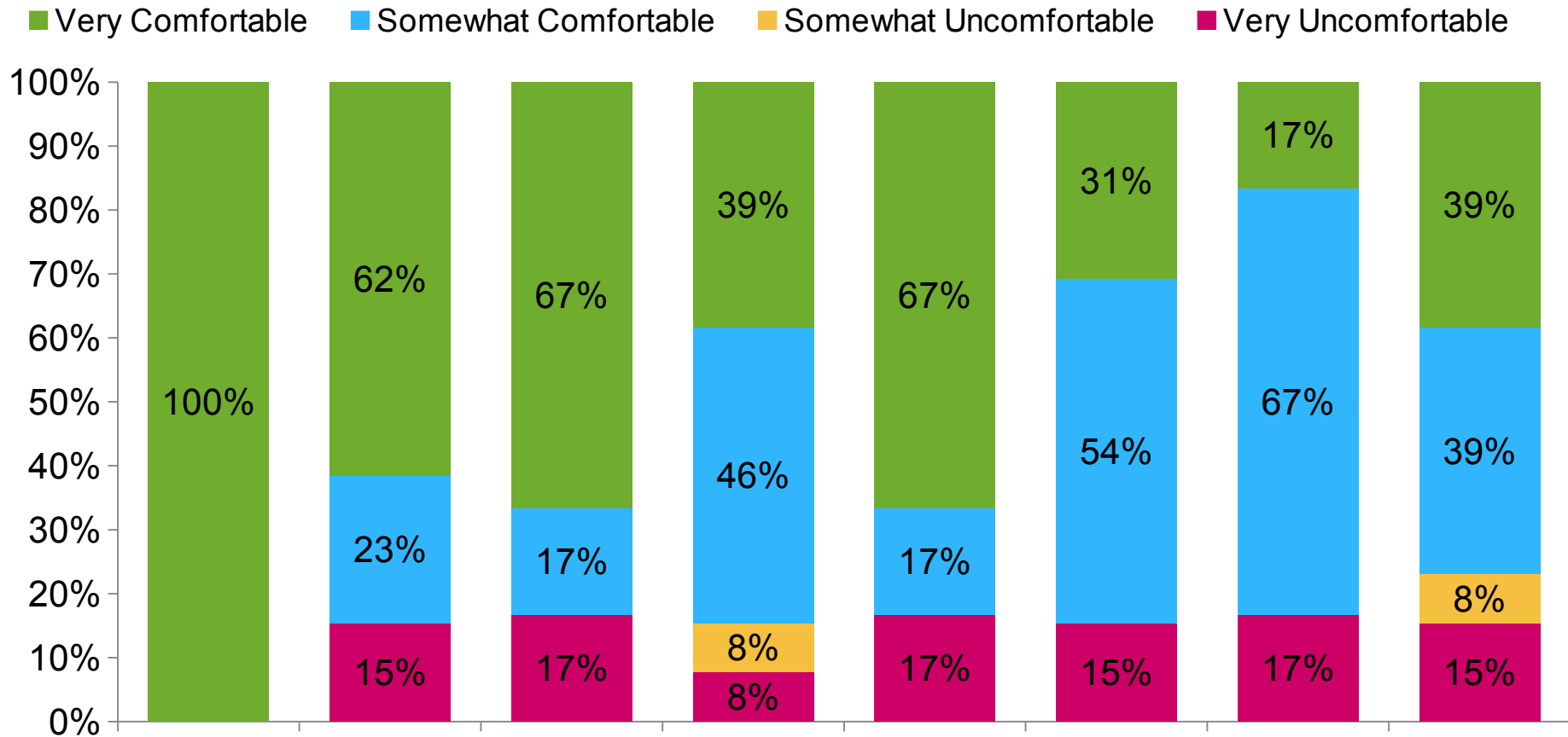


# Sexual Health Education Philosophy





# Health Teachers' Level of Comfort Teaching Various Health Topics



## Implementation of Centers for Disease Control (CDC) Best Practices

<b>My health education curriculum . . .</b>	<b>Group</b>	<b>Disagree</b>	<b>Agree</b>	<b><i>M</i></b>	<b><i>SD</i></b>
focuses on reinforcing protective factors and increasing perceptions of personal risk and harmfulness of engaging in specific unhealthy practices and behaviors	FO	11.1%	88.9%	4.56	1.01
	UO	6.3%	87.5%	4.00	0.97
uses strategies designed to personalize information and engage students	FO	11.1%	88.9%	4.44	1.01
	UO	6.3%	81.3%	3.88	0.96
focuses on clear health goals and related behavioral outcomes	FO	11.1%	88.9%	4.44	1.01
	UO	6.3%	81.3%	4.00	1.03
addresses social pressures and influences	FO	0.0%	88.9%	4.56	0.73
	UO	6.3%	87.5%	4.13	1.03
addresses individual and group norms that support health-enhancing behaviors	FO	0.0%	88.8%	4.33	0.71
	UO	6.3%	87.6%	3.94	0.93
provides functional health knowledge that is basic, accurate, and directly contributes to health-promoting decisions and behaviors	FO	11.1%	88.9%	4.33	1.00
	UO	6.3%	87.6%	3.94	0.93

# Content Coverage - General

Topic	Group	Not at All	Small Extent	Moderate Extent	Large Extent
Waiting to have sex (abstinence)	FO	0.0%	0.0%	50.0%	50.0%
	UO	0.0%	25.0%	16.7%	58.3%
Referrals and resources (i.e., family planning centers)	FO	20.0%	40.0%	20.0%	20.0%
	UO	0.0%	50.0%	20.0%	30.0%
Strategies to avoid social pressure and influence (e.g., drugs, pregnancy)	FO	0.0%	0.0%	33.3%	66.7%
	UO	0.0%	8.3%	33.3%	58.3%
Refusal skills	FO	0.0%	16.7%	0.0%	83.3%
	UO	0.0%	0.0%	33.3%	66.7%

# Content Coverage – Contraception Methods

Topic	Group	Not at All	Small Extent	Moderate Extent	Large Extent
Use of traditional contraceptive methods	FO	16.7%	50.0%	16.7%	16.7%
	UO	18.2%	9.1%	54.5%	18.2%
Effectiveness of traditional contraceptive methods	FO	16.7%	33.3%	33.3%	16.7%
	UO	9.1%	18.2%	54.5%	18.2%
Use of advanced contraceptive methods	FO	20.0%	60.0%	20.0%	0.0%
	UO	18.2%	18.2%	54.5%	9.1%
Effectiveness of advanced contraceptive methods	FO	20.0%	60.0%	20.0%	0.0%
	UO	27.3%	9.1%	54.5%	9.1%
Use of emergency contraception	FO	60.0%	0.0%	40.0%	0.0%
	UO	45.5%	27.3%	18.2%	9.1%
Effectiveness of emergency contraception	FO	75.0%	0.0%	25.0%	0.0%
	UO	45.5%	27.3%	18.2%	91%

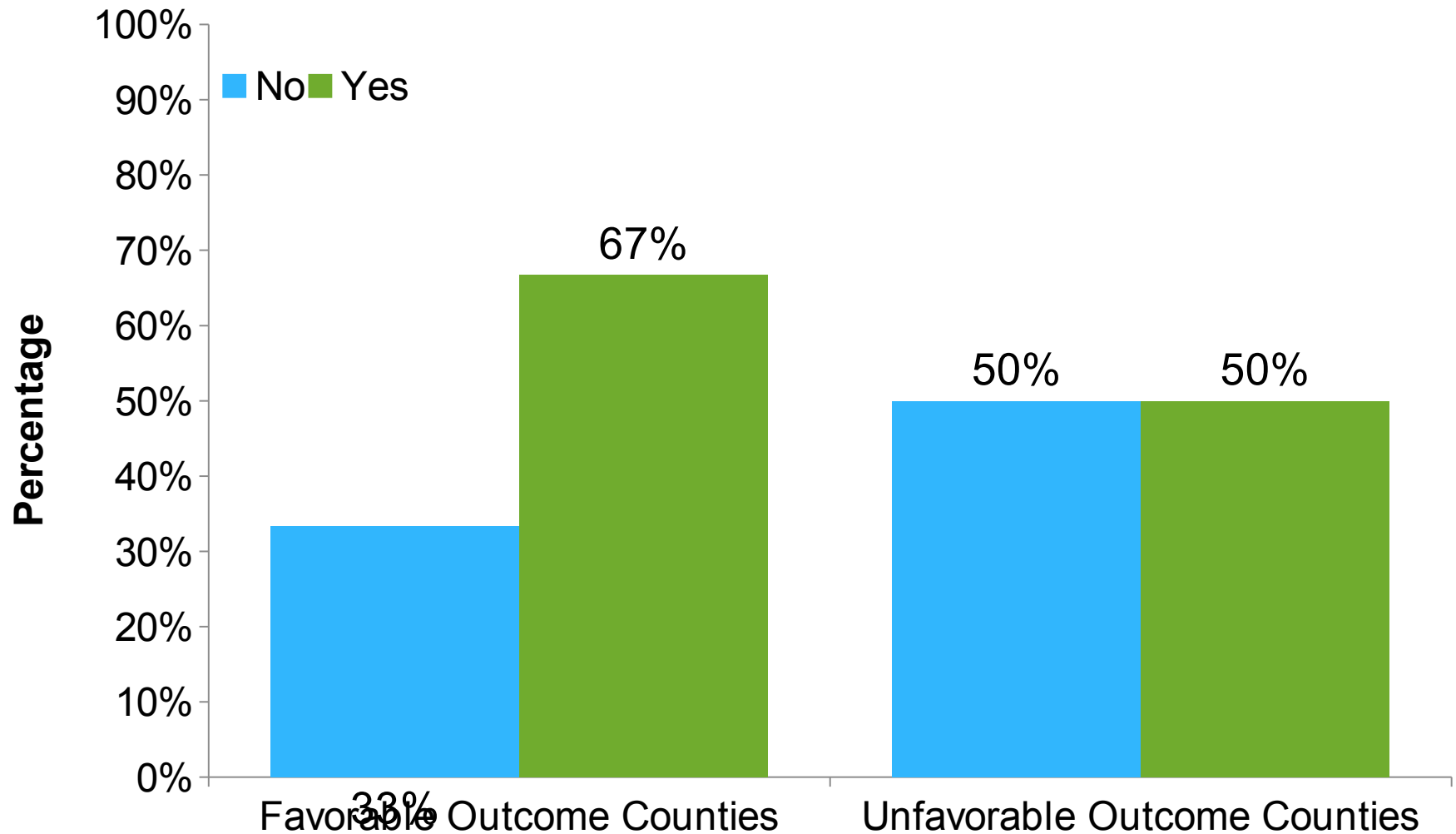
# Content Coverage – Planning and Nutrition for a Healthy Pregnancy

Topic	Group	Not at All	Small Extent	Moderate Extent	Large Extent
Pregnancy prevention	FO	0.0%	16.7%	33.3%	50.0%
	UO	0.0%	16.7%	58.3%	25.0%
Effects of alcohol on a developing fetus	FO	0.0%	20.0%	20.0%	60.0%
	UO	0.0%	27.3%	45.5%	27.3%
Effects of tobacco on a developing fetus	FO	0.0%	20.0%	40.0%	40.0%
	UO	0.0%	33.3%	41.7%	25.0%
Effects of addictive drugs on a developing fetus	FO	0.0%	20.0%	20.0%	60.0%
	UO	0.0%	33.3%	41.7%	25.0%
Process of lactation	FO	60.0%	20.0%	0.0%	20.0%
	UO	36.4%	27.3%	27.3%	9.1%
Importance of breast milk to the baby	FO	40.0%	40.0%	0.0%	20.0%
	UO	27.3%	27.3%	36.4%	9.1%

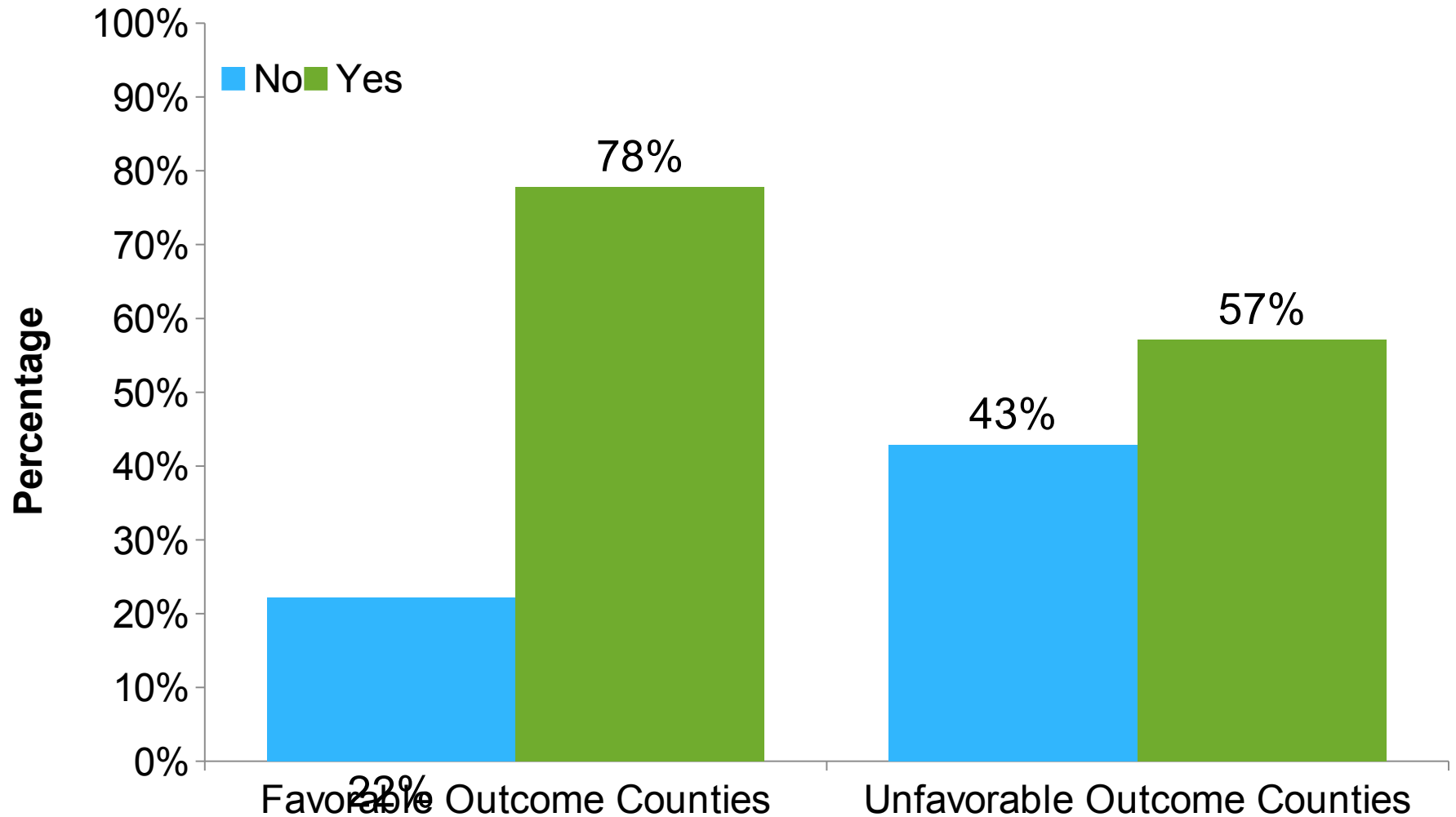
# Content Coverage – Communicable Diseases

Topic	Group	Not at All	Small Extent	Moderate Extent	Large Extent
Transmission of STDs/STIs/HIV/AIDS	FO	0.0%	0.0%	16.7%	83.3%
	UO	0.0%	16.7%	41.7%	41.7%
Prevention of STDs/STIs/HIV/AIDS	FO	0.0%	16.7%	16.7%	66.7%
	UO	0.0%	16.7%	41.7%	41.7%
Symptoms of STDs/STIs/HIV/AIDS	FO	0.0%	16.7%	16.7%	66.7%
	UO	8.3%	16.7%	33.3%	41.7%
Long-term consequences of STDs/STIs/HIV/AIDS	FO	0.0%	16.7%	16.7%	66.7%
	UO	8.3%	16.7%	33.3%	41.7%

# Use of Outside Presenters and Community Resources



# Need for Additional Professional Development





# Phase 3

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Identify educational practices and services related to positive outcomes for teen mothers and their babies statewide.

## Relationships Among Health Practices and Services and Outcomes

Practices and Services	Healthy Mothers		
	Teen Births	Smoking	Second + Birth
Access to SBHCs			
Access to CBHCs			
Number of family planning contracts			
Number of students enrolling in FACS			
Health knowledge (HEAP mean)			
Number of APPI presentations			
Number of teen moms enrolling in RFTS			

# Relationships Among Health Practices and Services and Outcomes

Health Practices and Services	Healthy Babies			
	Bottle or Combined Feeding	Low Birth Weight	NICU	At-Risk Babies
Access to SBHCs				
Access to CBHCs				
Number of family planning contracts				
Number of students enrolling in FACS				
Health knowledge (HEAP mean)				
Number of APPI presentations				
Number of teen moms enrolling in RFTS				

# Reflections and Recommendations

- Prevent or Delay Teen Pregnancy and Childbearing
- Study the Curricula
- Stop Smoking
- Encourage Breastfeeding
- Continue Improving Access to Prenatal Health Care
- Collaborate for Success
- Study More