Spokane School-Based Health Center (SBHC) Implementation

Project Introduction & Kick-off

September 22, 2010

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Purpose of Meeting

1. **Formally begin a planning and implementation process with the goal of opening SBHCs in Spokane County.**
2. **Communicate the need for and benefit of SBHCs in our community.**
3. **Identify and bring together key stakeholders and experts to ensure a successful SBHC pilot in Fall 2011.**
4. **Give attendees the information needed to decide whether to be on the SBHC advisory committee and/or recommend others.**

Introductions of SBHC Community Stakeholders

Organization	Name
SC Community Services, Housing, and Community Dev.	Alan Zeuge
Central Valley School District	Debbie Cochran
CHAS	Dr. David Bare
Cheney Public Schools	Kristi Thurston
Community Minded Enterprises	Ralph DeChristoforo
Empire Health Foundation	Antony Chaing
ESD 101	Julie Schultz
	Tricia Hughes
EWU	Laurel Kelly
Glover Middle School	Travis Schulhauser
Gonzaga	Debbie Judd
Group Health	Dr. Debra Gore
Havermale Alternative HS	Fred Schrumpf
Holmes Elementary	Steve Barnes
INHS, CHER & HTN	Emily Fleury
NW Center for Congenital Heart Disease	Dr. Carl Garabedian
Project Access	John Driscoll
Rockwood Clinic	Dr. Alexandra Carey
	Dr. Stephen Luber
	Carol Rudy
	Cindy Roberts-Hollon

Organization	Name
Sacred Heart Children's Hospital	Michael Haight
	Peggy Mangiaracina
	Dr. Ponrat Pakreo
Spokane County Regional Support Network	Susan Hammond
Spokane Falls Family Clinic	Dr. Christopher Goodwin
	Dr. Lanie Cox
	Randy Hartman
Spokane Human Services	Jerrie Allard
Spokane Public Schools	Kathe Reed-McKay
	Dr. Wendy Bleecker
	Sarah Griffith
SRHD	Alexandra Hayes
	Ida Ovenick
Tooth Savers LLC	Gail Heacox
UW Medical School	Dr. John McCarthy
WA Institute for Public Policy	Mason Burley
West Valley School District	Brian Dunlap
	Christi Malsam
WSU	Dr. Margaret Bruya
WSU AHEC	Roy Harrington

Tonight's Agenda

Meeting Introduction & Purpose (Ben) – 20 min

- Introductions around the room

Why Implement SBHCs in Spokane? – 30 min

- The link between health and education (Stacy)
- The SBHC solution & benefits (Mike)

Seattle's SBHC Experience (TJ) – 30 min

Project Approach & Next Steps (Mike) – 10 min

Q&A – 30 min

Why Implement SBHCs?

The Link Between Health and Education

Stacy Wenzl, MHPA

Spokane Regional Health District

Community Health Assessment

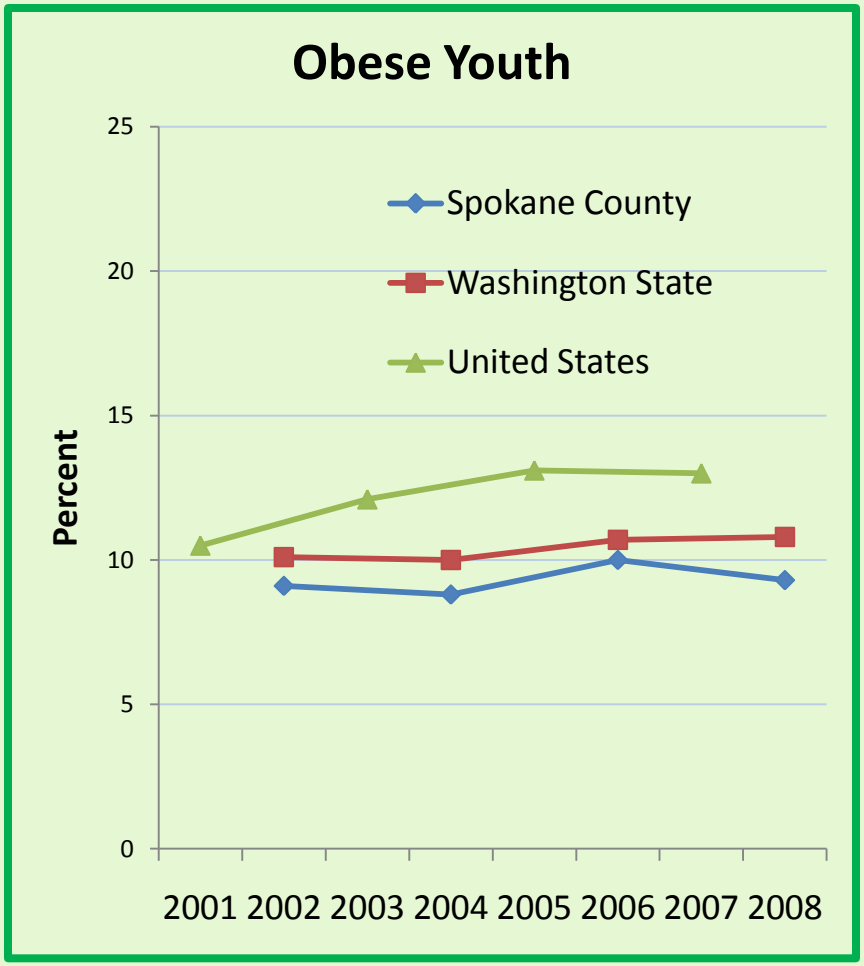
Overview

- Health of Spokane's Children and Youth
  - Insurance status
  - Chronic health conditions
  - Oral health
  - Health behaviors
  - Mental health
  - Reproductive health
  - Vaccine preventable diseases/immunizations
  - Hospitalizations
- Health and Education are Linked
- School-based Health Interventions

Insurance Status

- Poverty < 100% FPL
  - SC:15.6% ~ 16,350 individuals
- Insurance Status
  - SC: 5.5% uninsured ~ 5,760 individuals
- Eligibility
  - SC: 7.6% eligible but uninsured ~ 4,200
- Utilization (DSHS)
  - 50% use rate

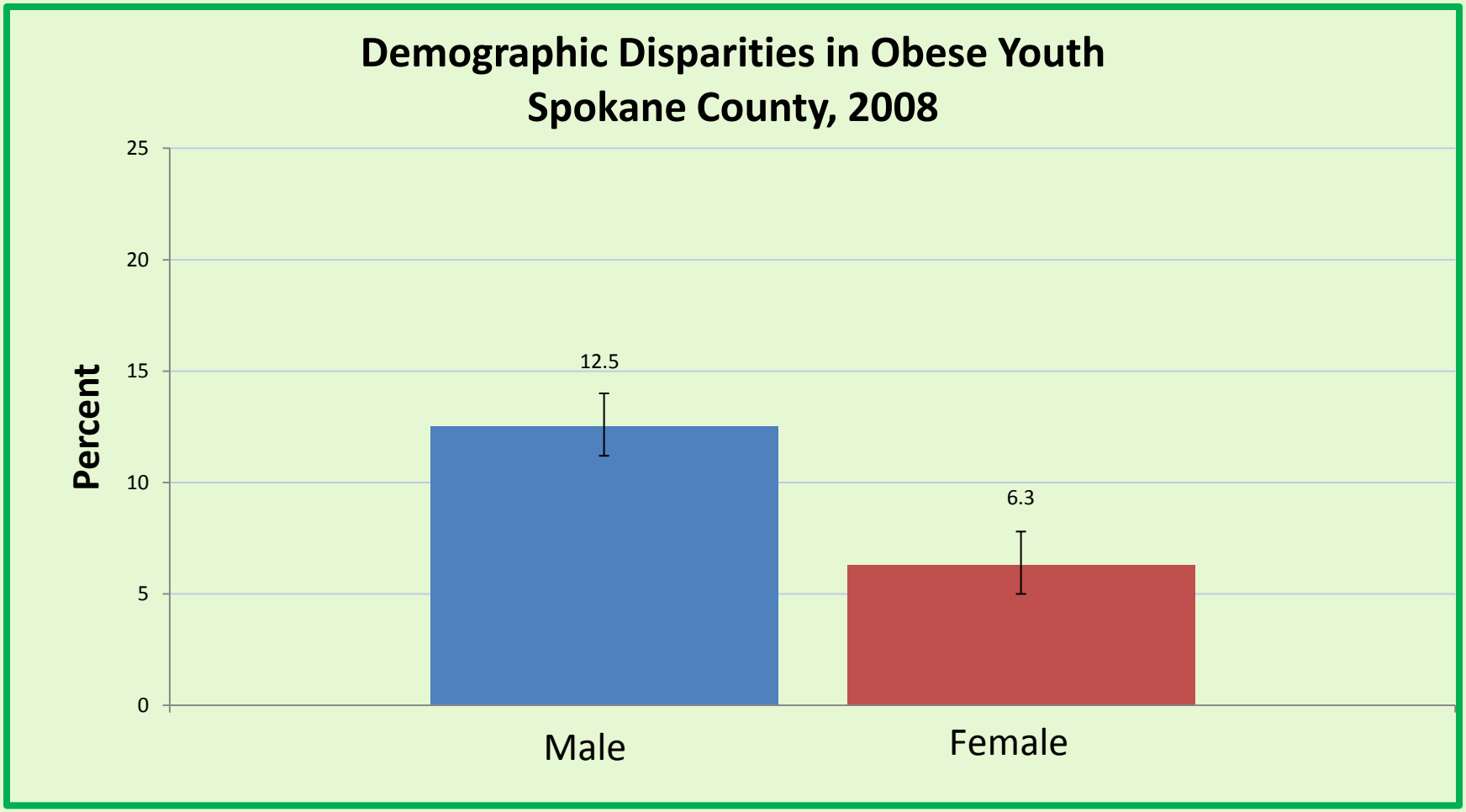
Chronic Health Conditions



- 1 out of 10 youth were obese in 2008.
- No significant change since 2002.
- Lower proportion of obese adolescents in Spokane than WA State or US in 2007/08.

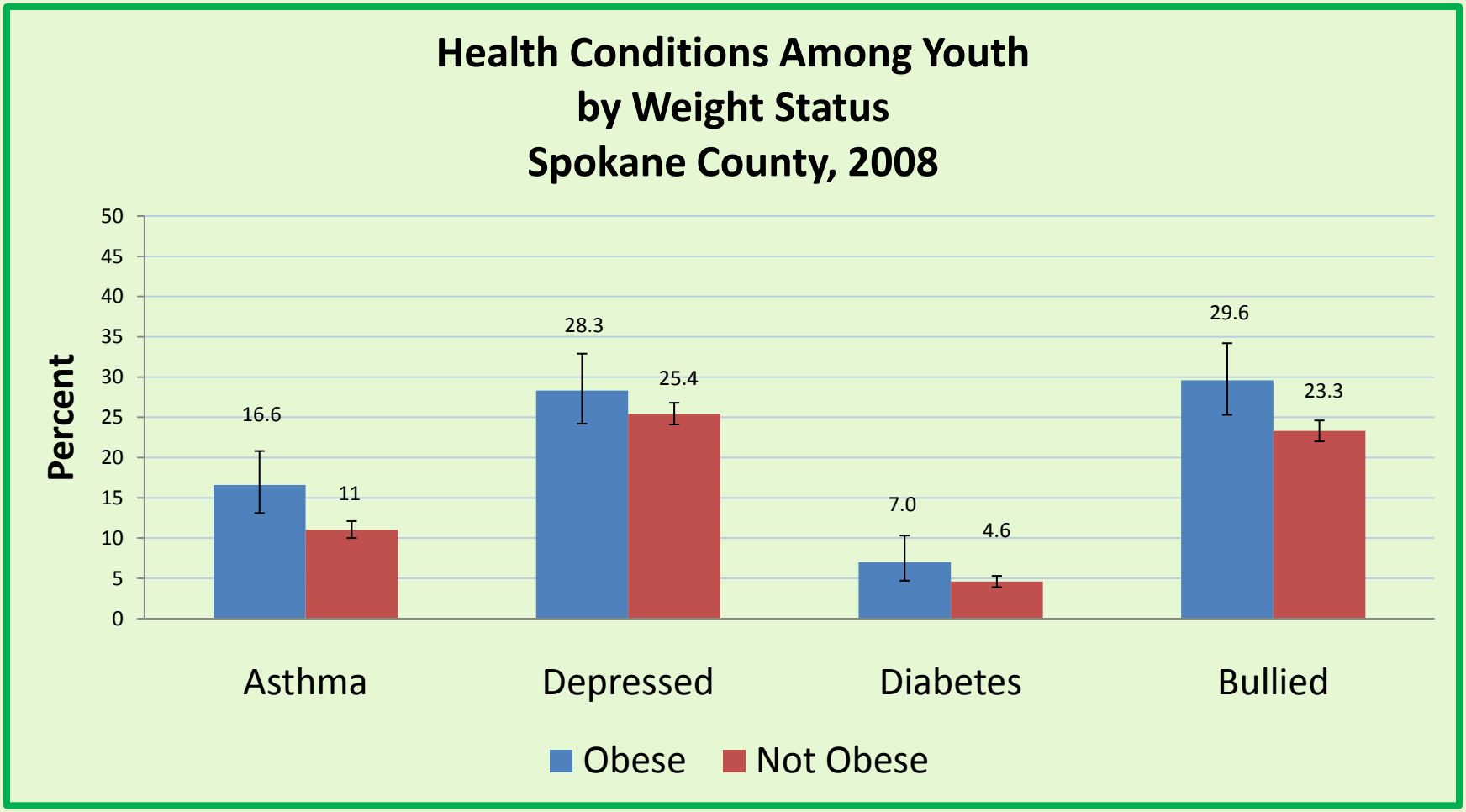
Source: Healthy Youth Survey

Chronic Health Conditions



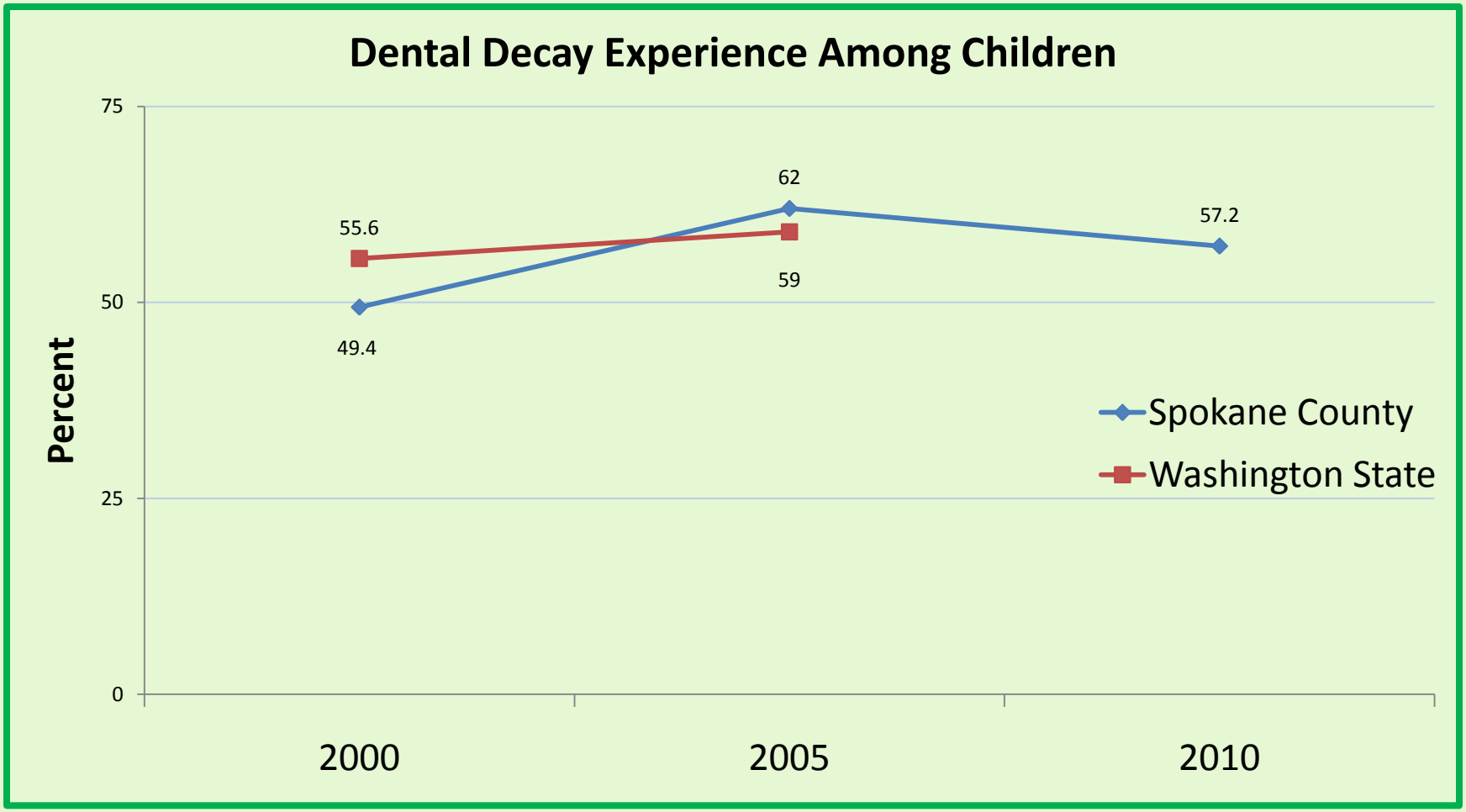
Source: Healthy Youth Survey

Chronic Health Conditions



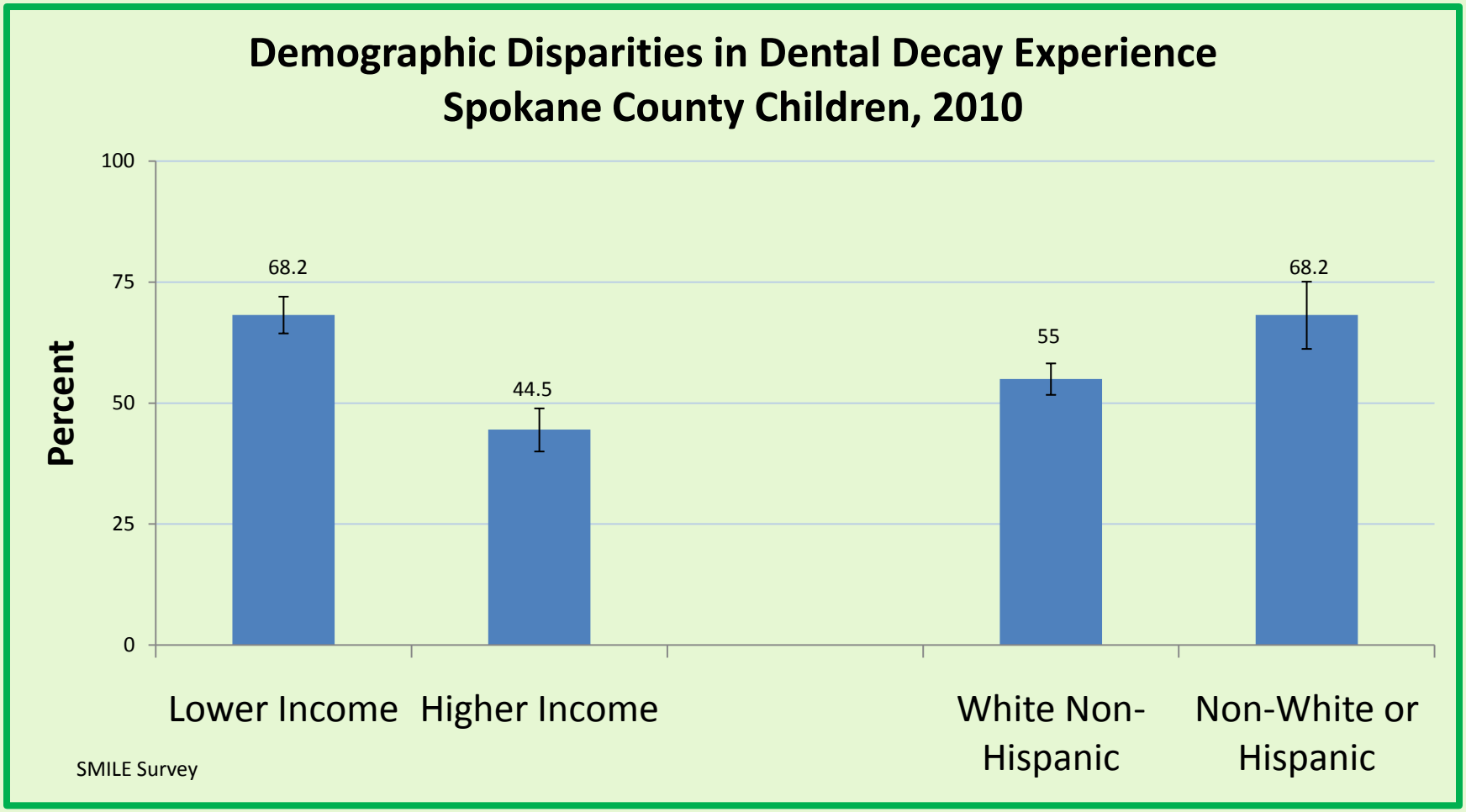
Source: Healthy Youth Survey

Oral Health



Source: SMILE Survey

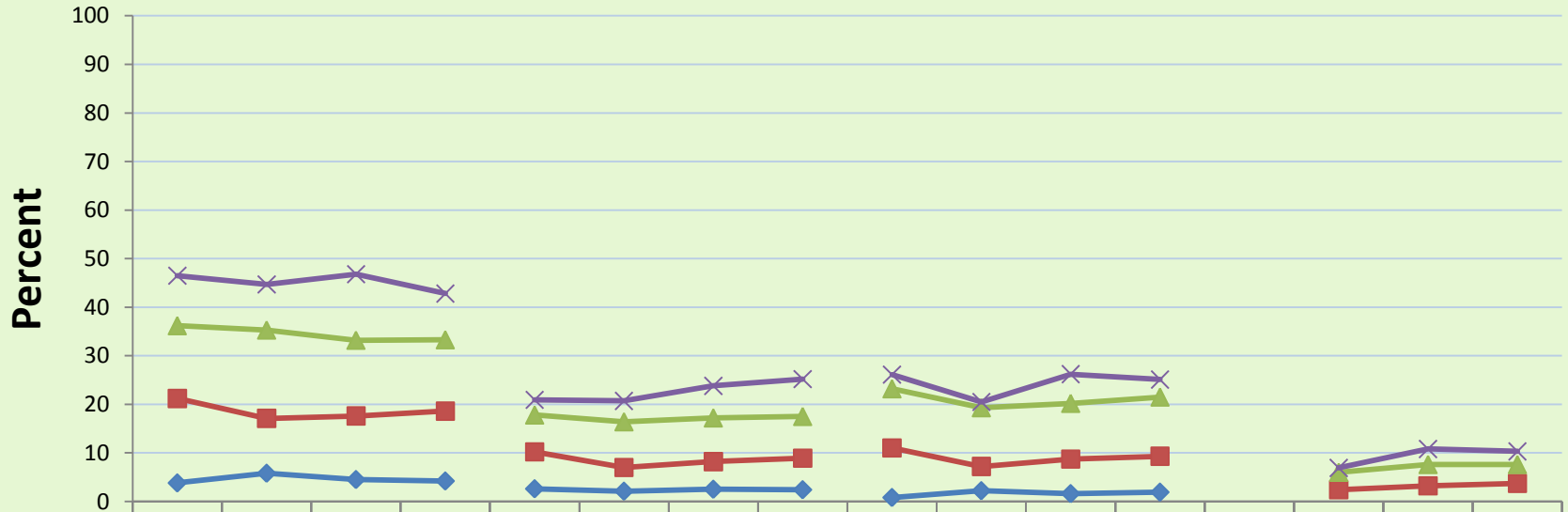
Oral Health



Source: SMILE Survey

Health Behaviors

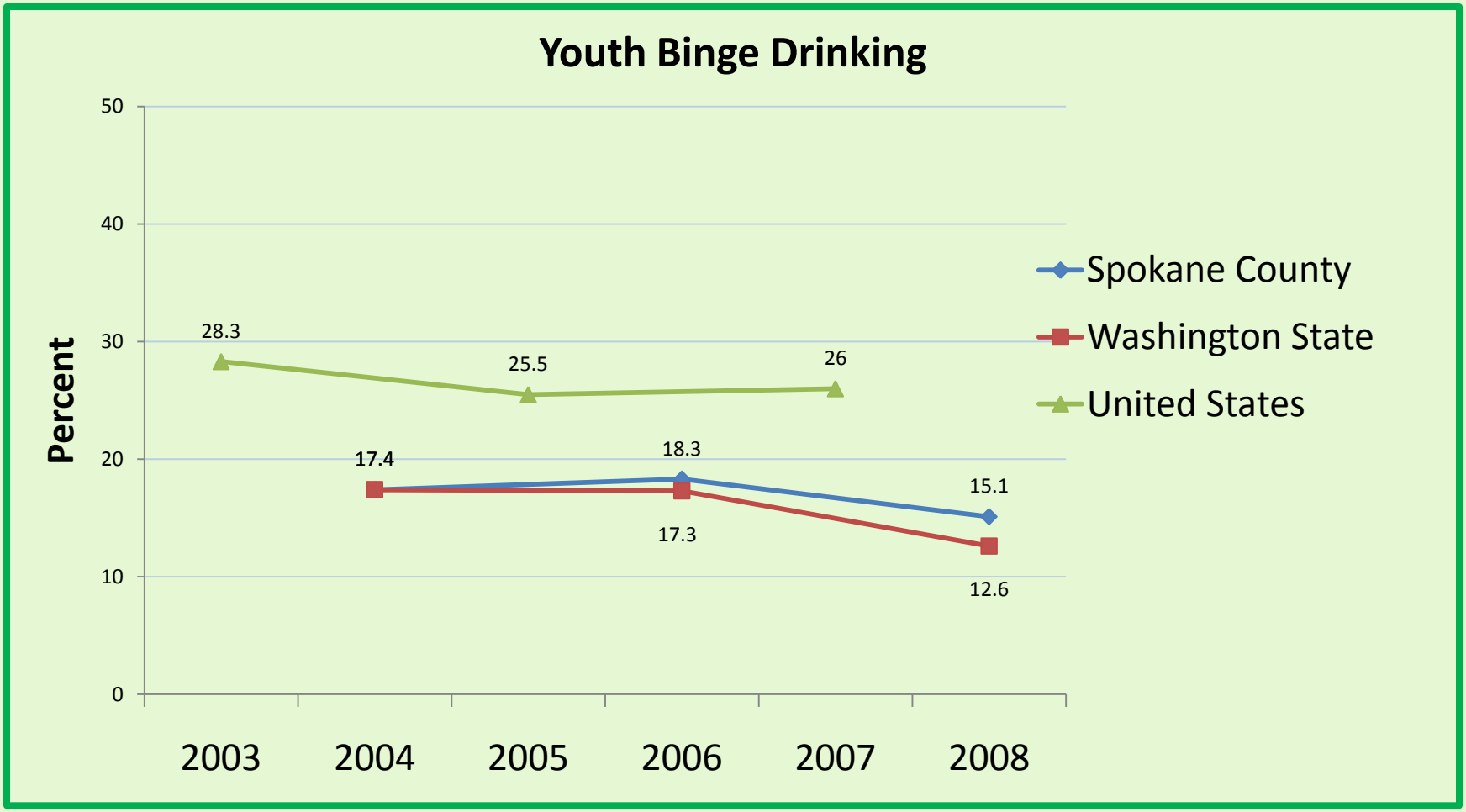
Substance Use in the Last 30 Days by Grade
Spokane County



	Alcohol				Cigarettes				Marijuana				Other illegal drugs			
	2002	2004	2006	2008	2002	2004	2006	2008	2002	2004	2006	2008	2002	2004	2006	2008
6th	3.8	5.8	4.5	4.2	2.6	2.1	2.5	2.4	0.8	2.2	1.6	1.9				
8th	21.2	17.1	17.6	18.6	10.2	7.0	8.2	8.9	11.0	7.2	8.7	9.3		2.4	3.2	3.7
10th	36.2	35.3	33.2	33.3	17.8	16.4	17.2	17.5	23.2	19.3	20.2	21.5		6.0	7.6	7.6
12th	46.5	44.7	46.8	42.8	20.9	20.7	23.8	25.2	26.1	20.5	26.2	25.1		6.9	10.8	10.3

Source: Healthy Youth Survey

Health Behaviors



Source: Healthy Youth Survey

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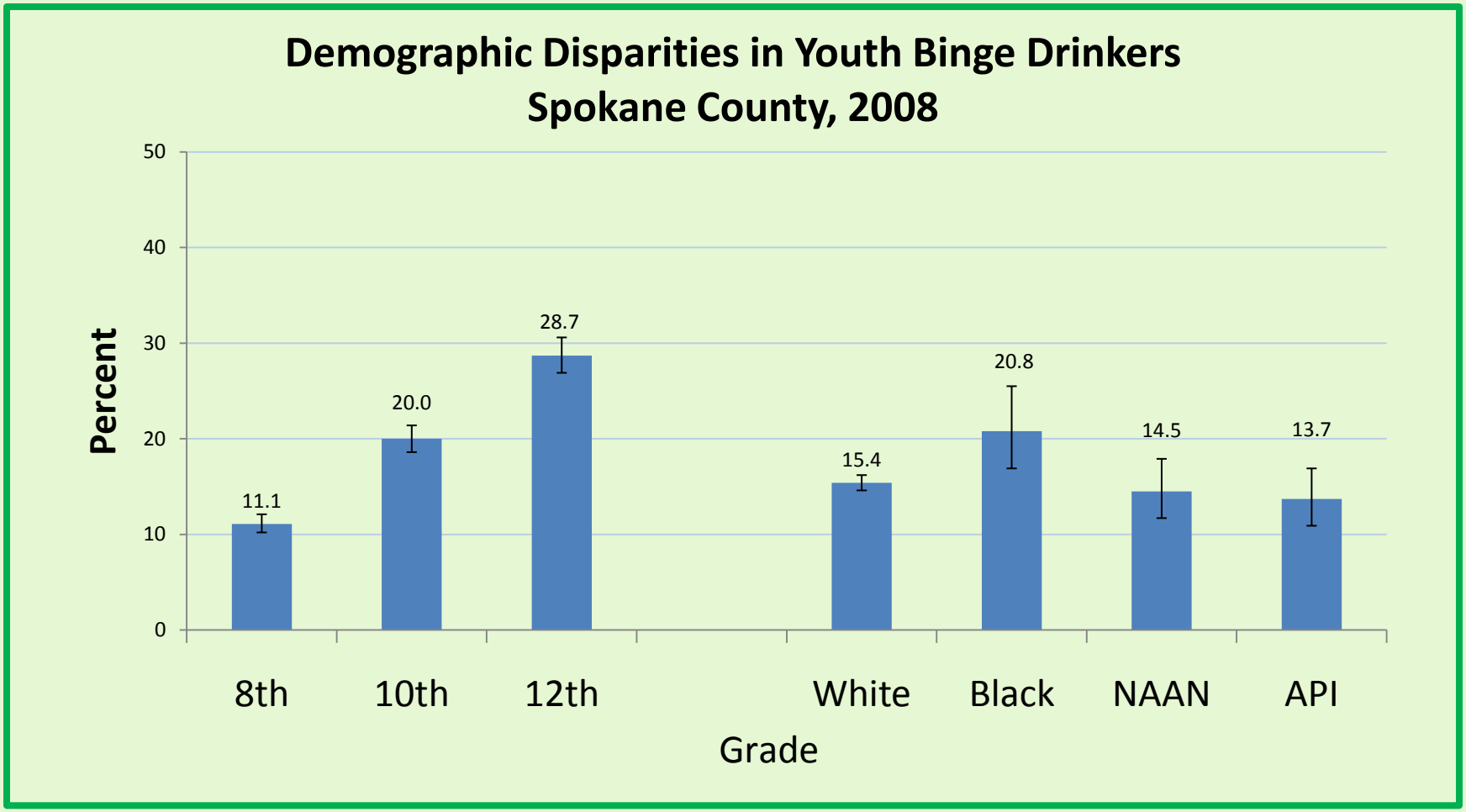

Source: Healthy Youth Survey

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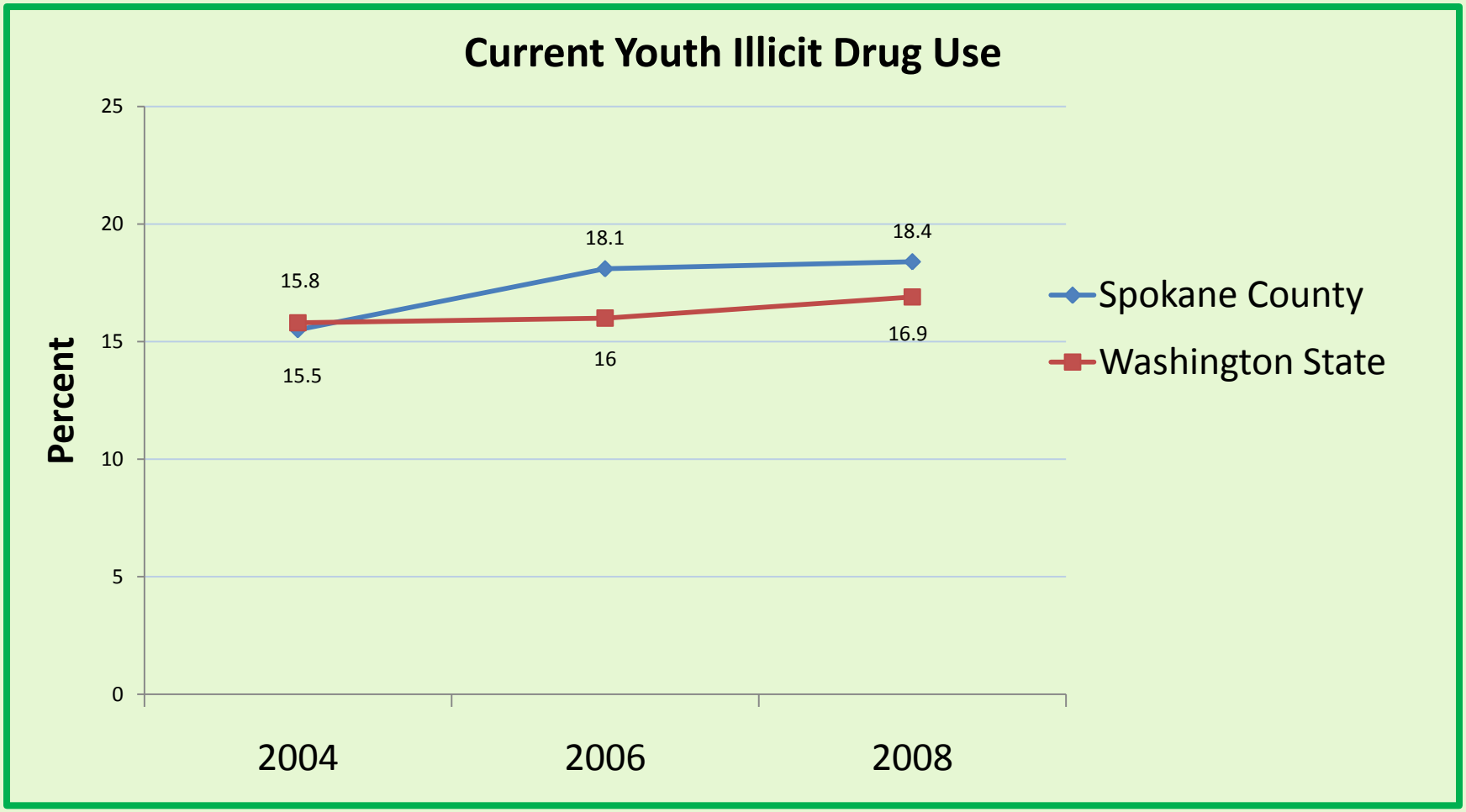

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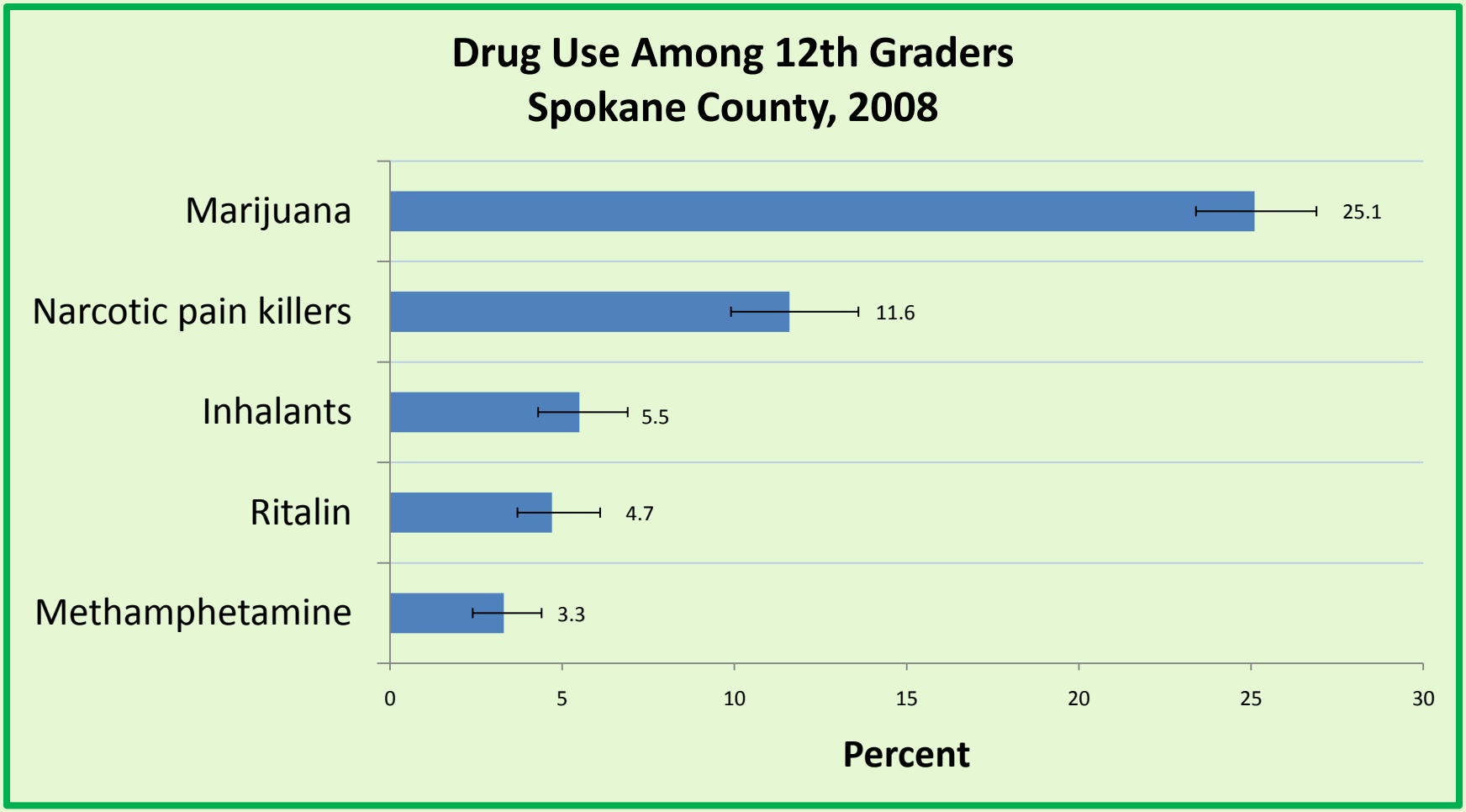
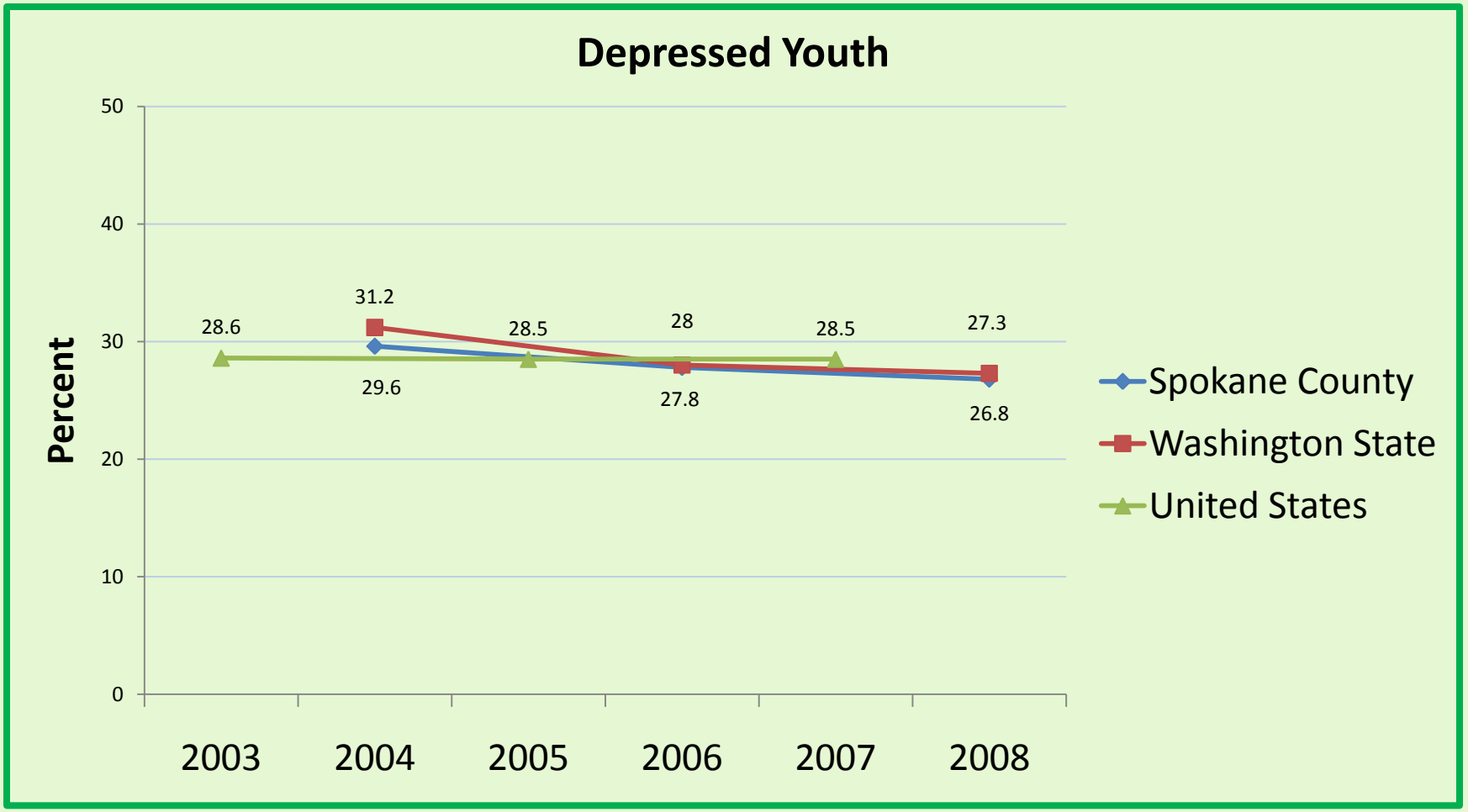


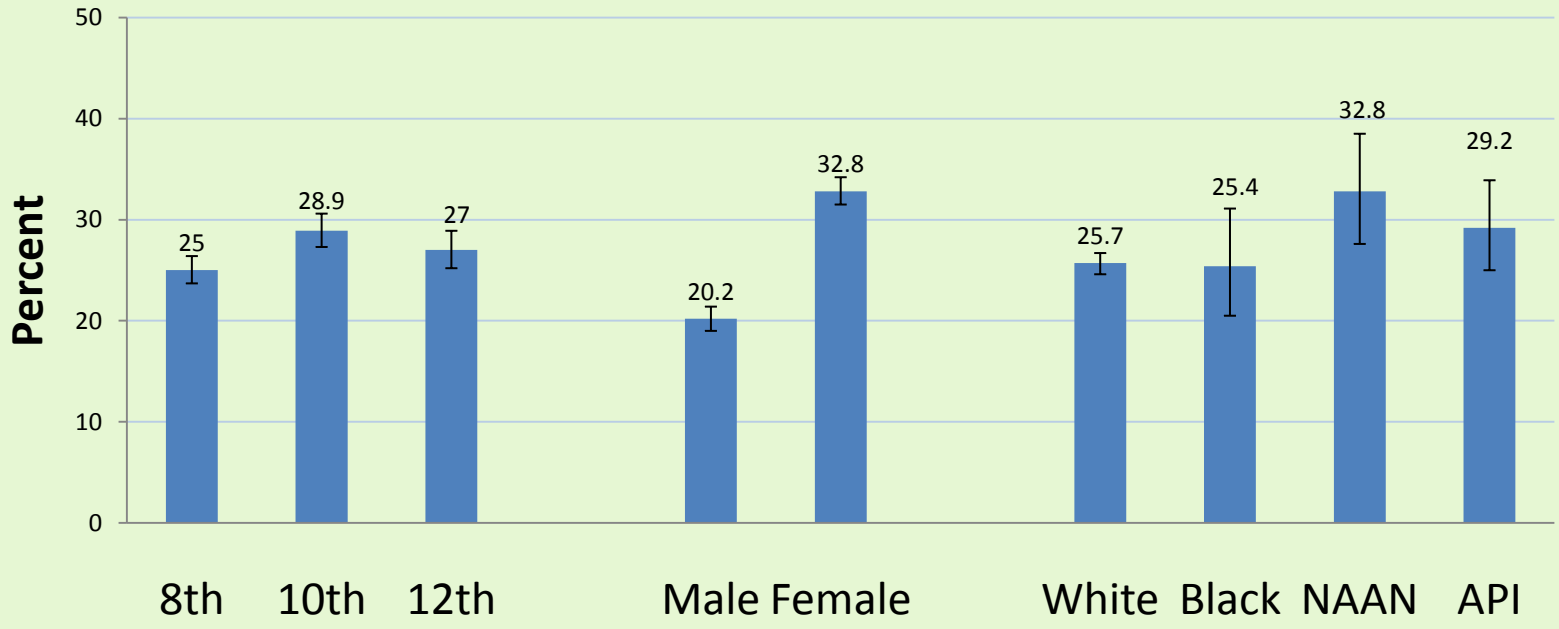
Source: Healthy Youth Survey

Mental Health



Source: Healthy Youth Survey

Mental Health

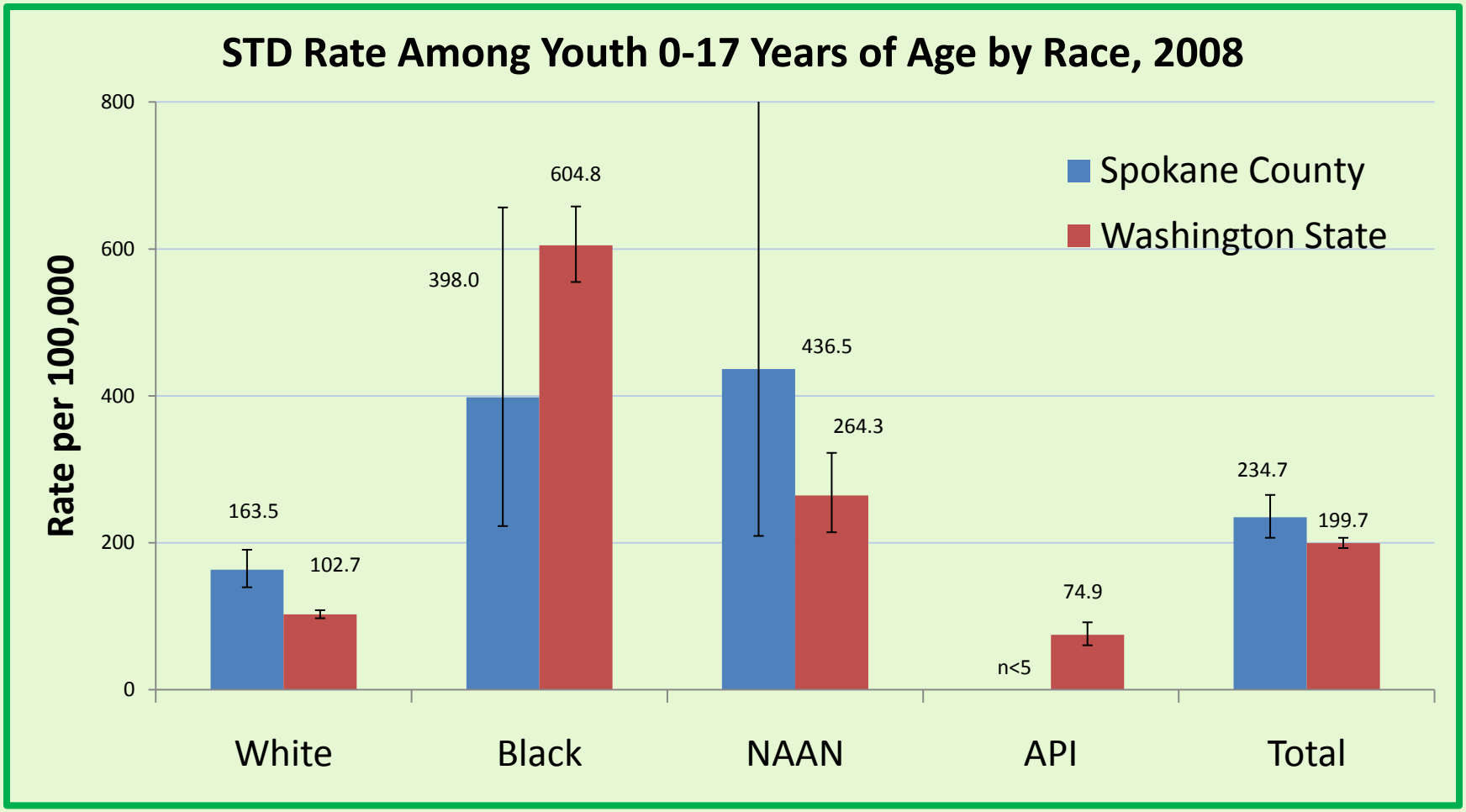


Source: Healthy Youth Survey

Reproductive Health

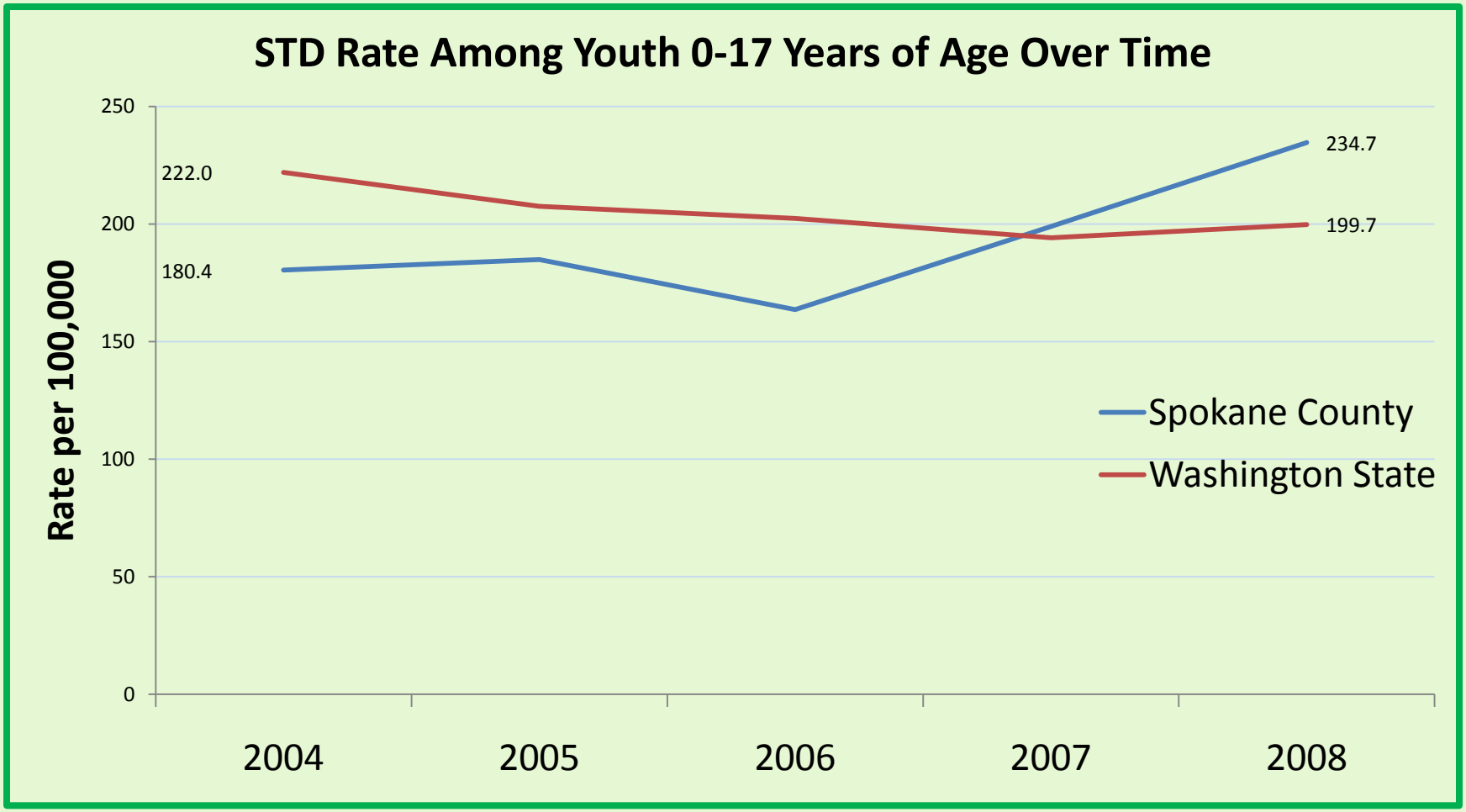
- Behaviors
  - 43% of teens sexually active
- Sexually Transmitted Infections
  - 1,038 cases 2004-2008
- Teen Pregnancies
  - 1,237 pregnancies 2004 – 2008
  - 28% don’t receive first trimester prenatal care
  - 34% smoke

Reproductive Health



Source: Spokane Regional Health District, Communicable Disease Prevention (STDs) Program

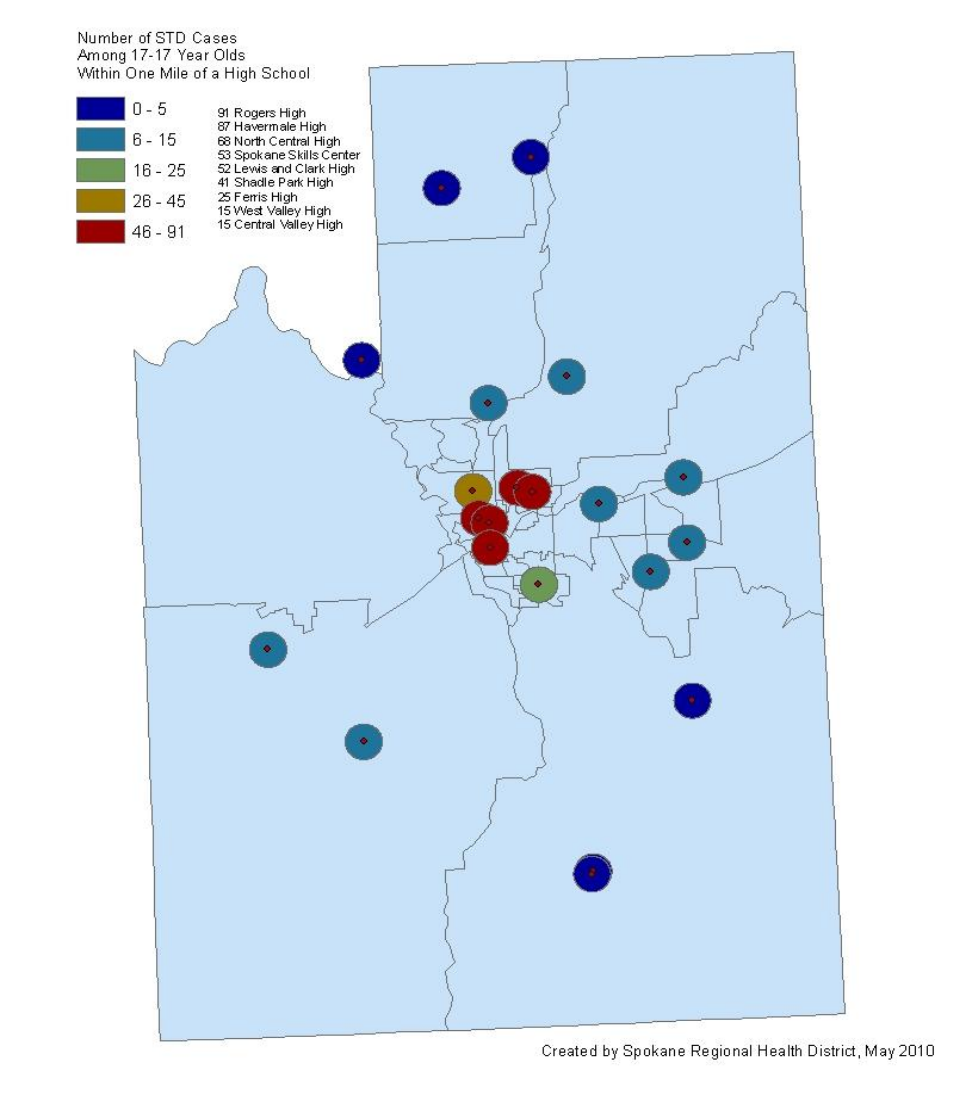
Reproductive Health



Source: Spokane Regional Health District, Communicable Disease Prevention (STDs) Program

Reproductive Health

STD Cases among adolescents in proximity to public high schools 2005-2009.



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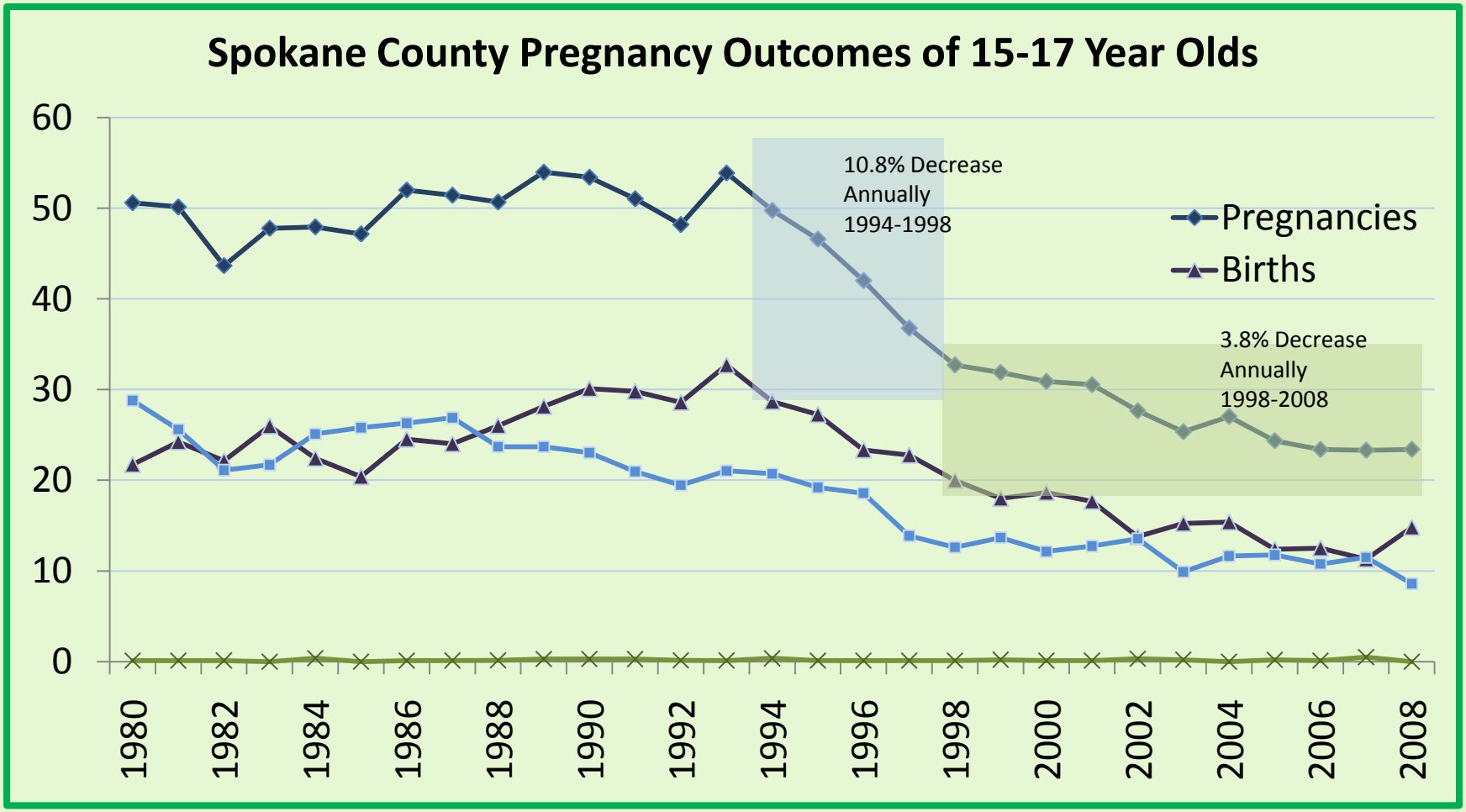
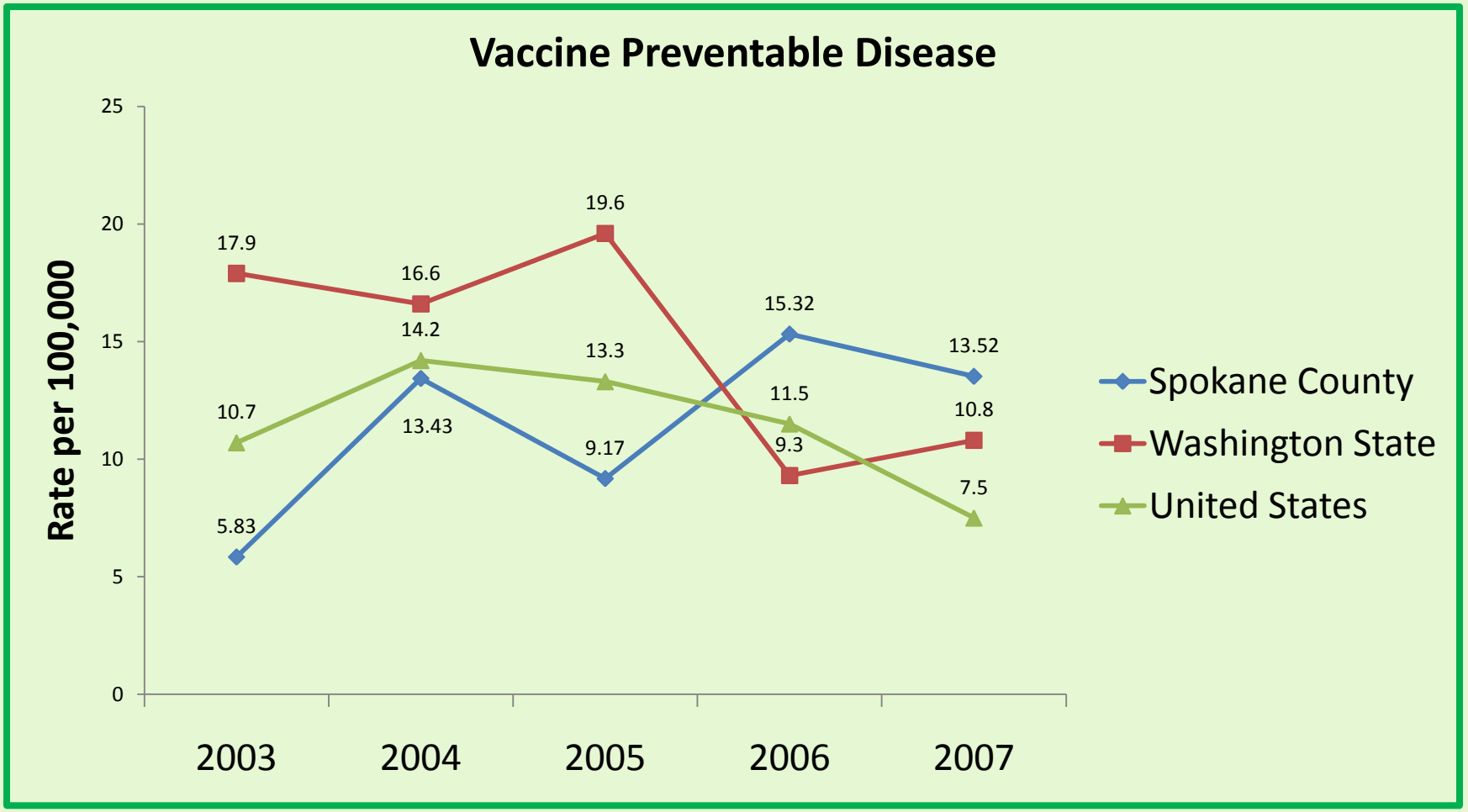
Reproductive Health

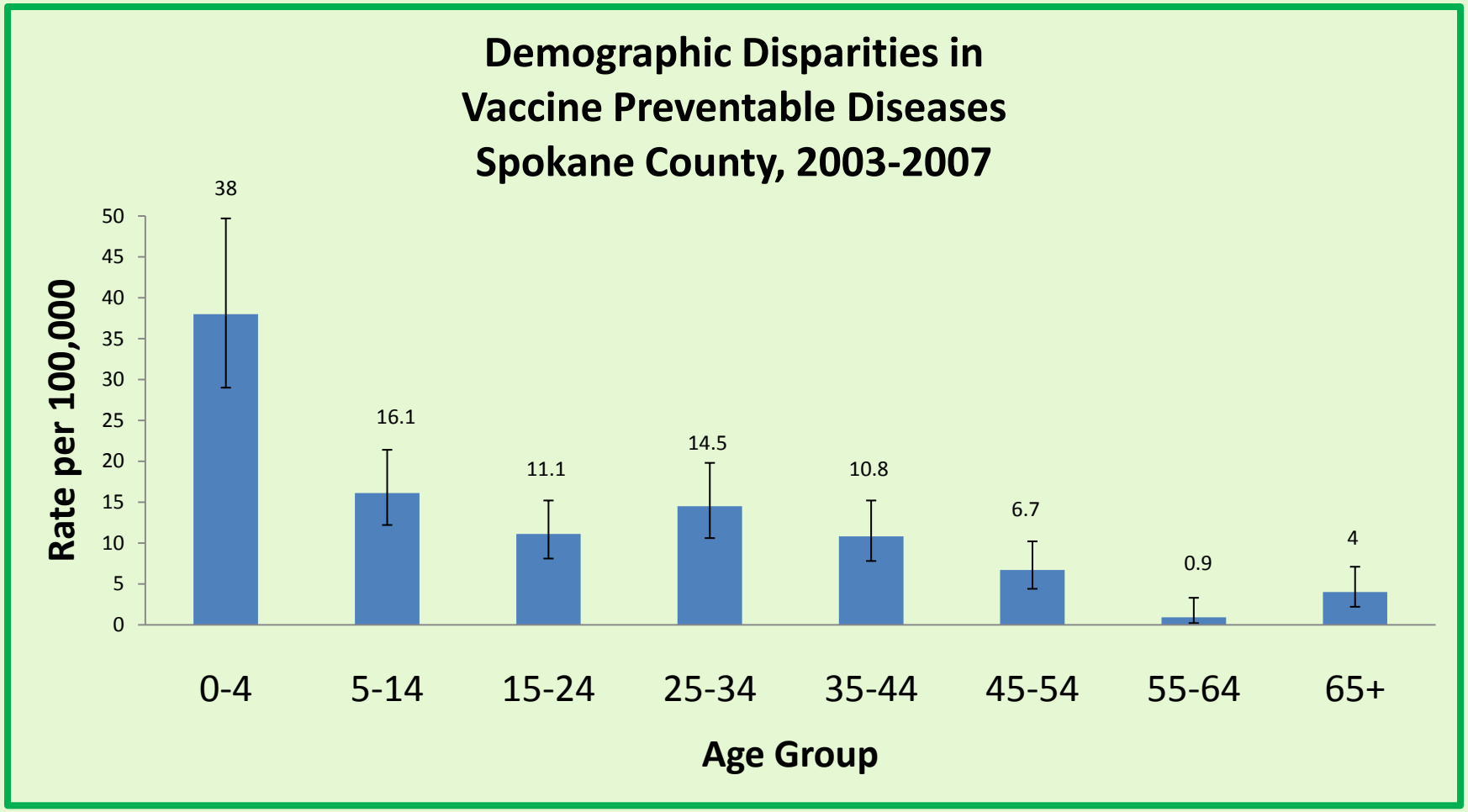


VPD/Immunizations



Source: Spokane Regional Health District, Communicable Disease Epidemiology Program

VPD/Immunizations



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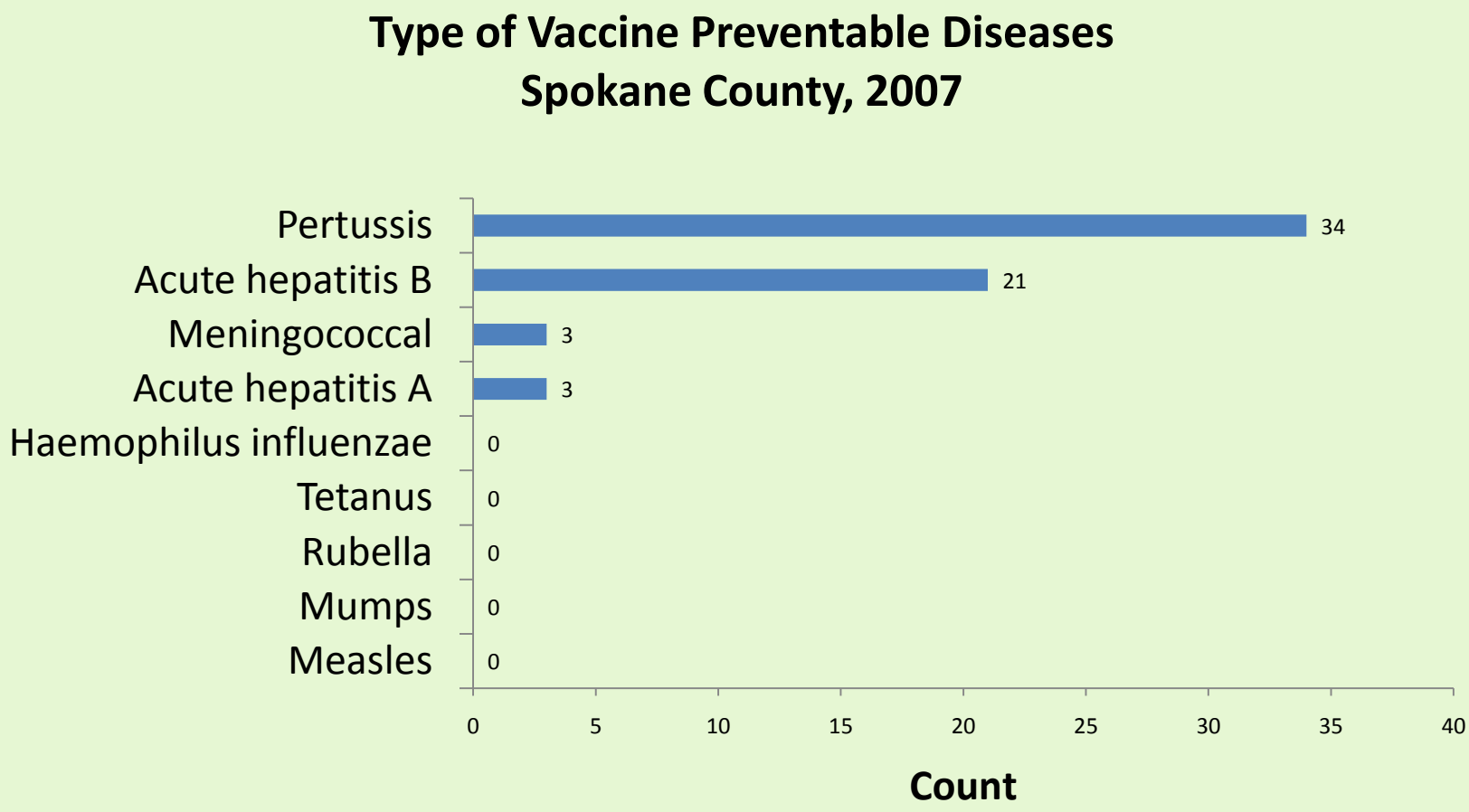

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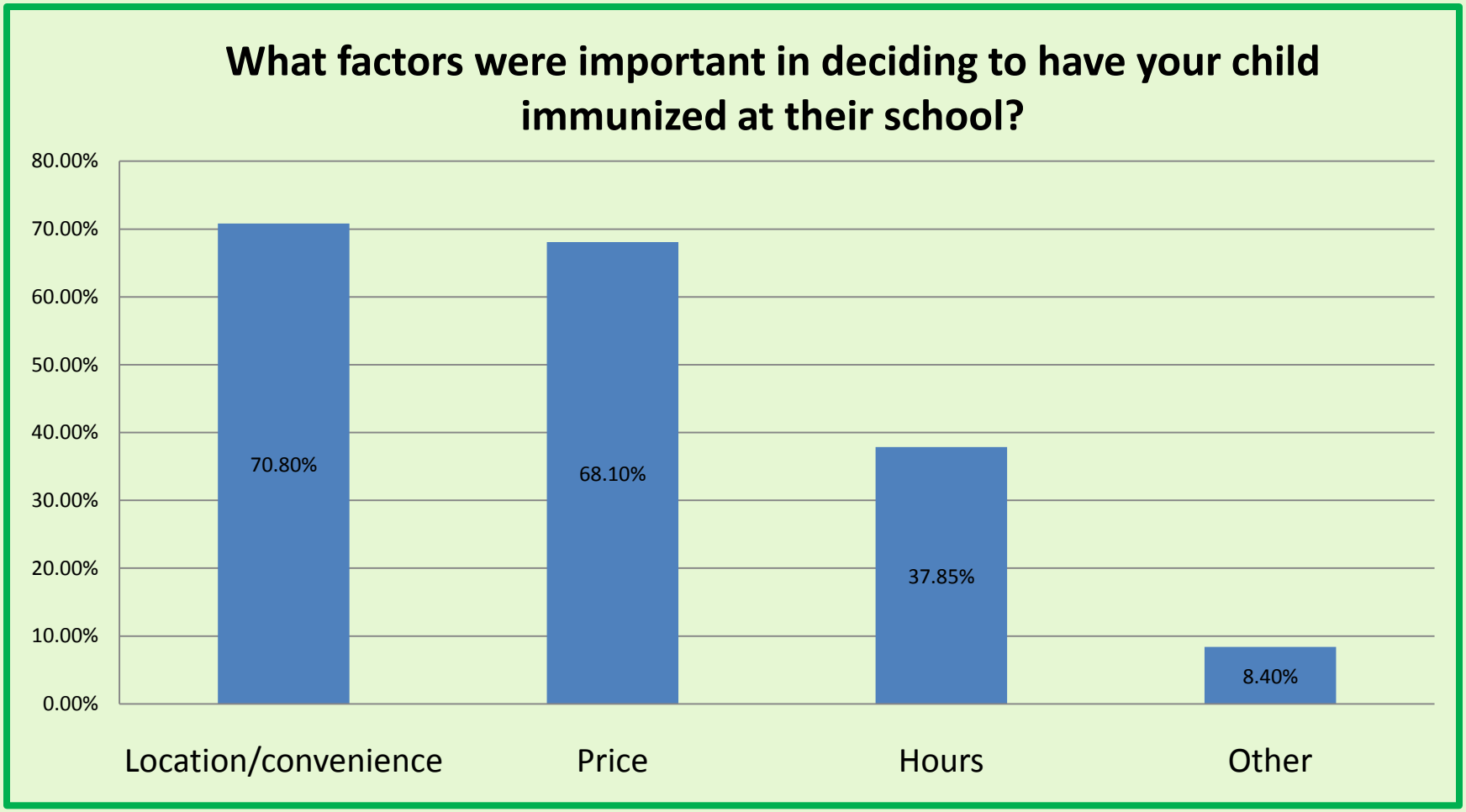


Source: Customer Satisfaction Surveys, Spokane Regional Health District, Immunization Outreach Program

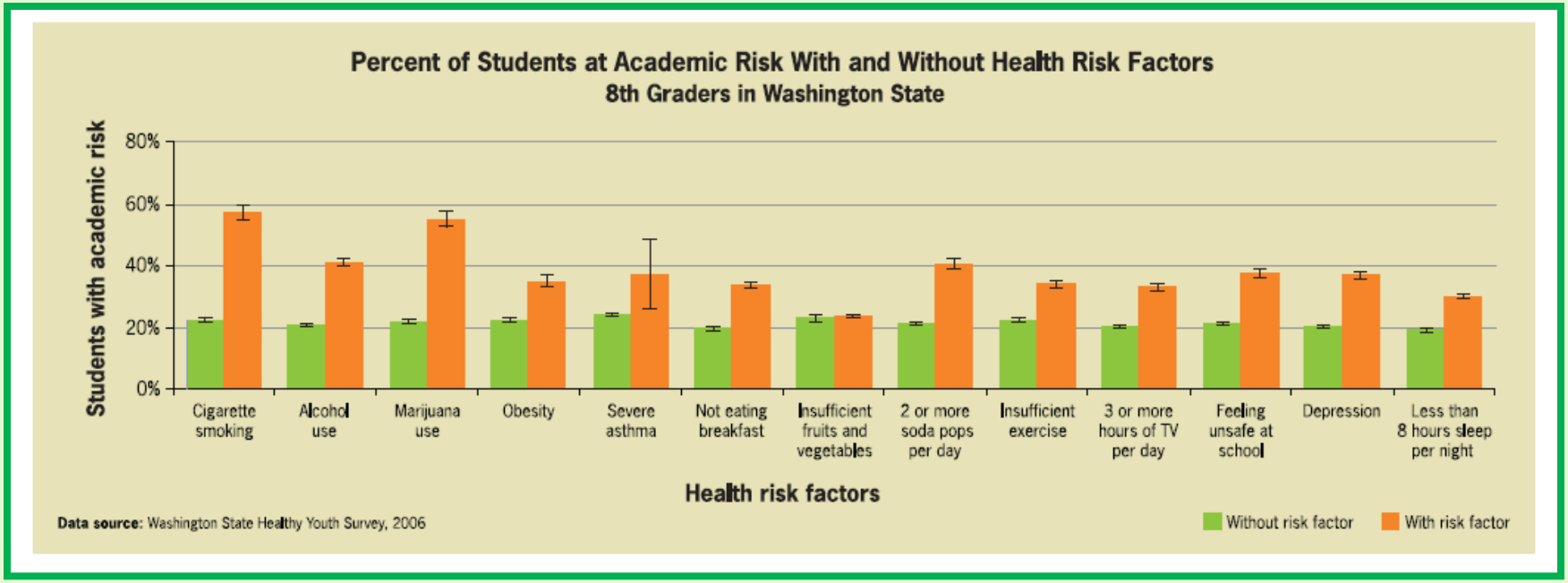
Hospitalizations

- Hospitalizations (0-17 years, 2008)
  - Leading causes: respiratory disease, digestive system disorder, unintentional injury, psychoses, childbirth, genitourinary disease (n=1542)
  - Unintentional injury (OR=1.4); psychoses (OR=1.9); respiratory disease (OR=1.2); genitourinary disease (OR=1.4); suicide (OR=1.9)
- Potentially avoidable ER visits
  - 5.6% ~ 2,362 cases

Health and Education are Linked

- Research Review: School-based Health Interventions and Academic Achievement
  - Health and education are linked
  - Every health risk can affect academic success
  - Interventions can narrow health disparities/inequities
  - Health interventions can improve learning *and* health
    - Julia Dilley, PhD, MES; WSOSPI; WASDOH; WASBOH

Health and Education are Linked



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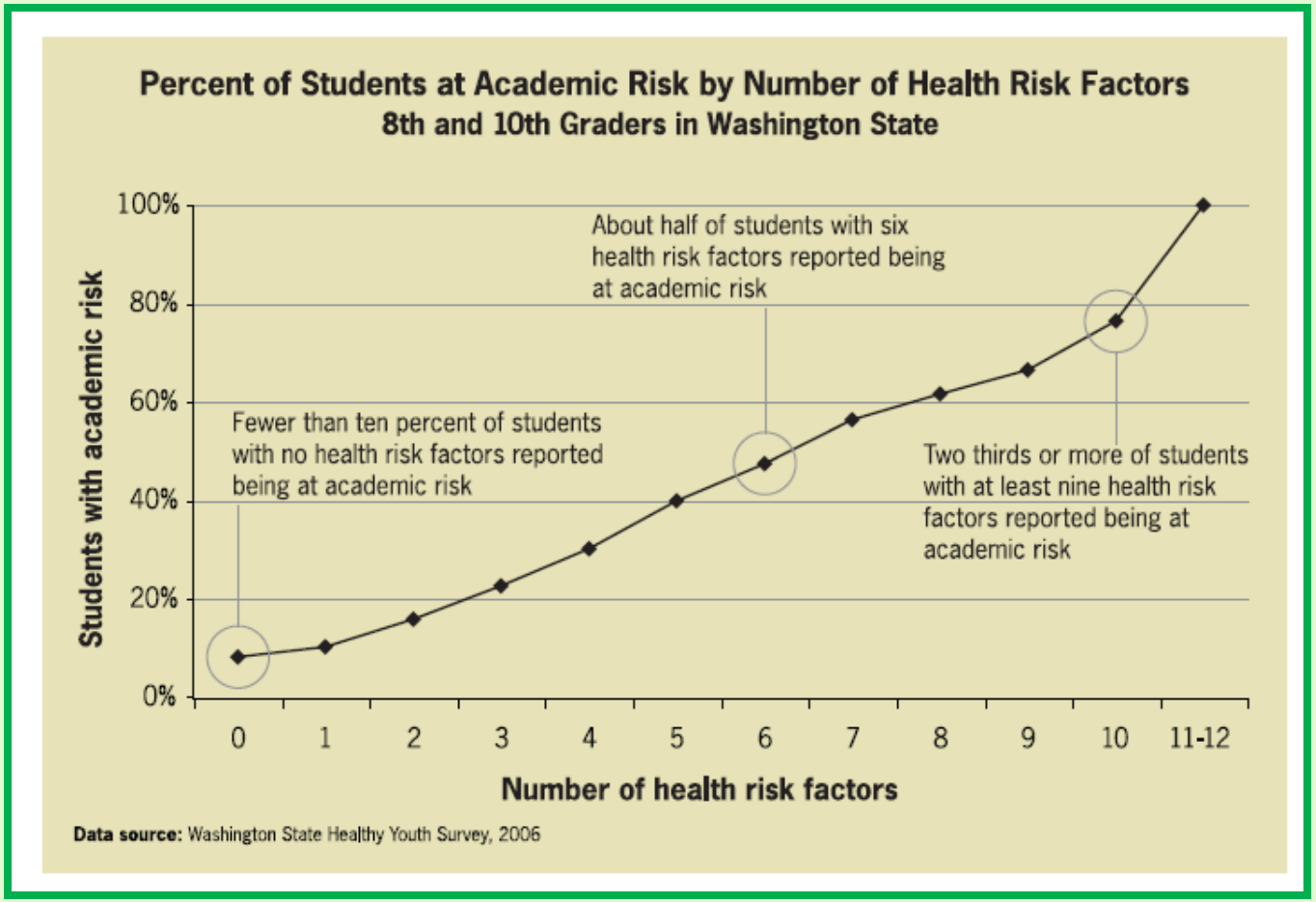

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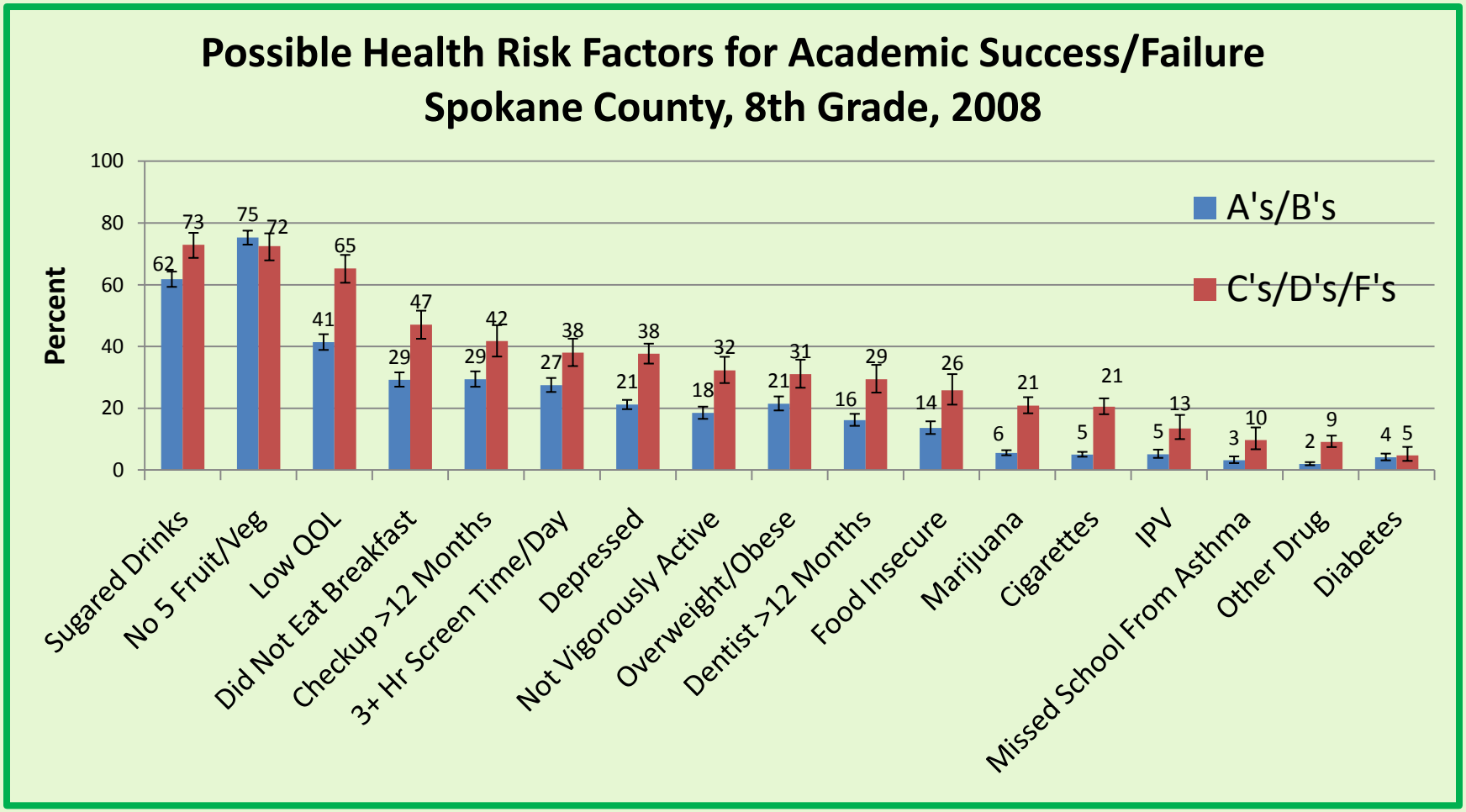

Source: Healthy Youth Survey

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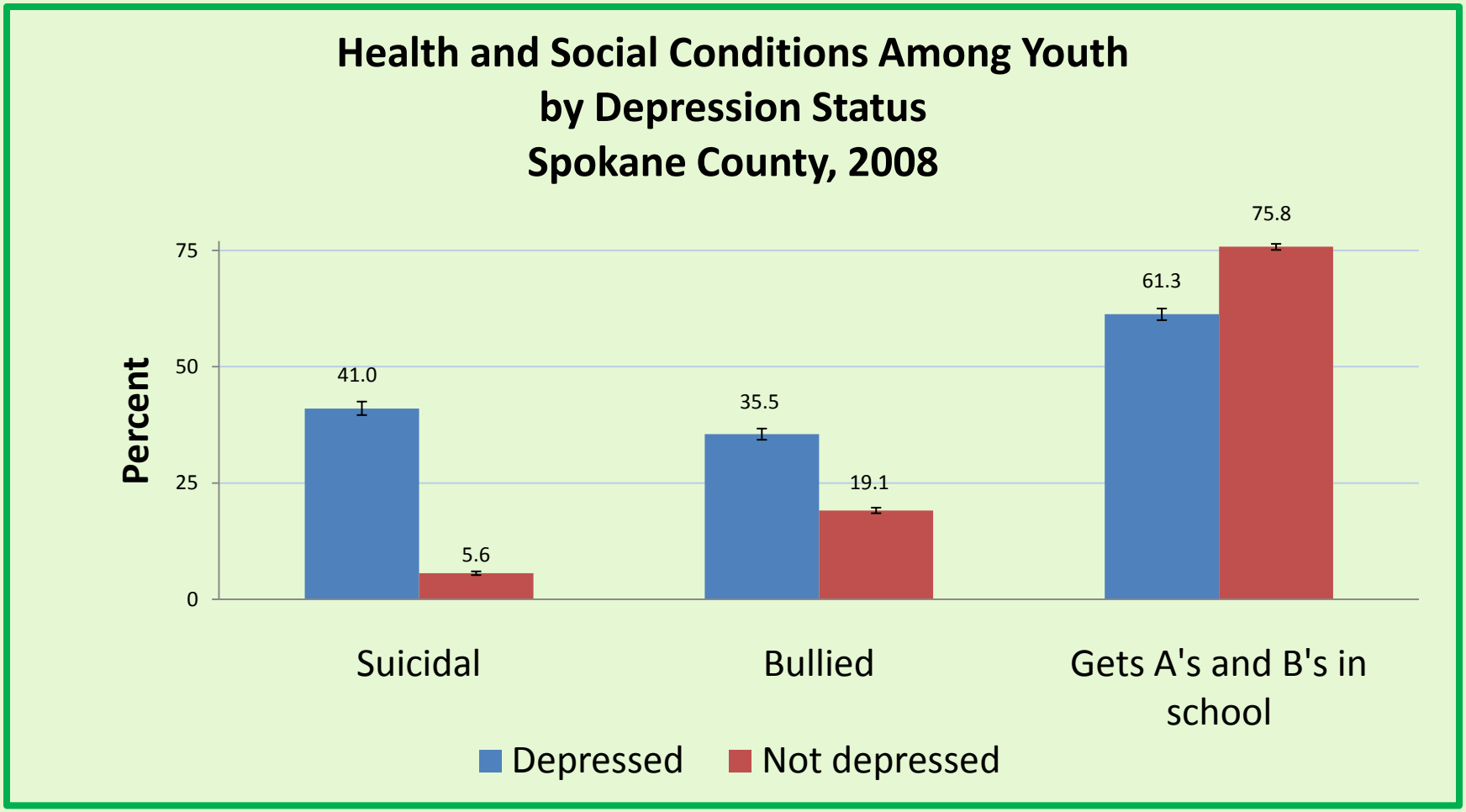

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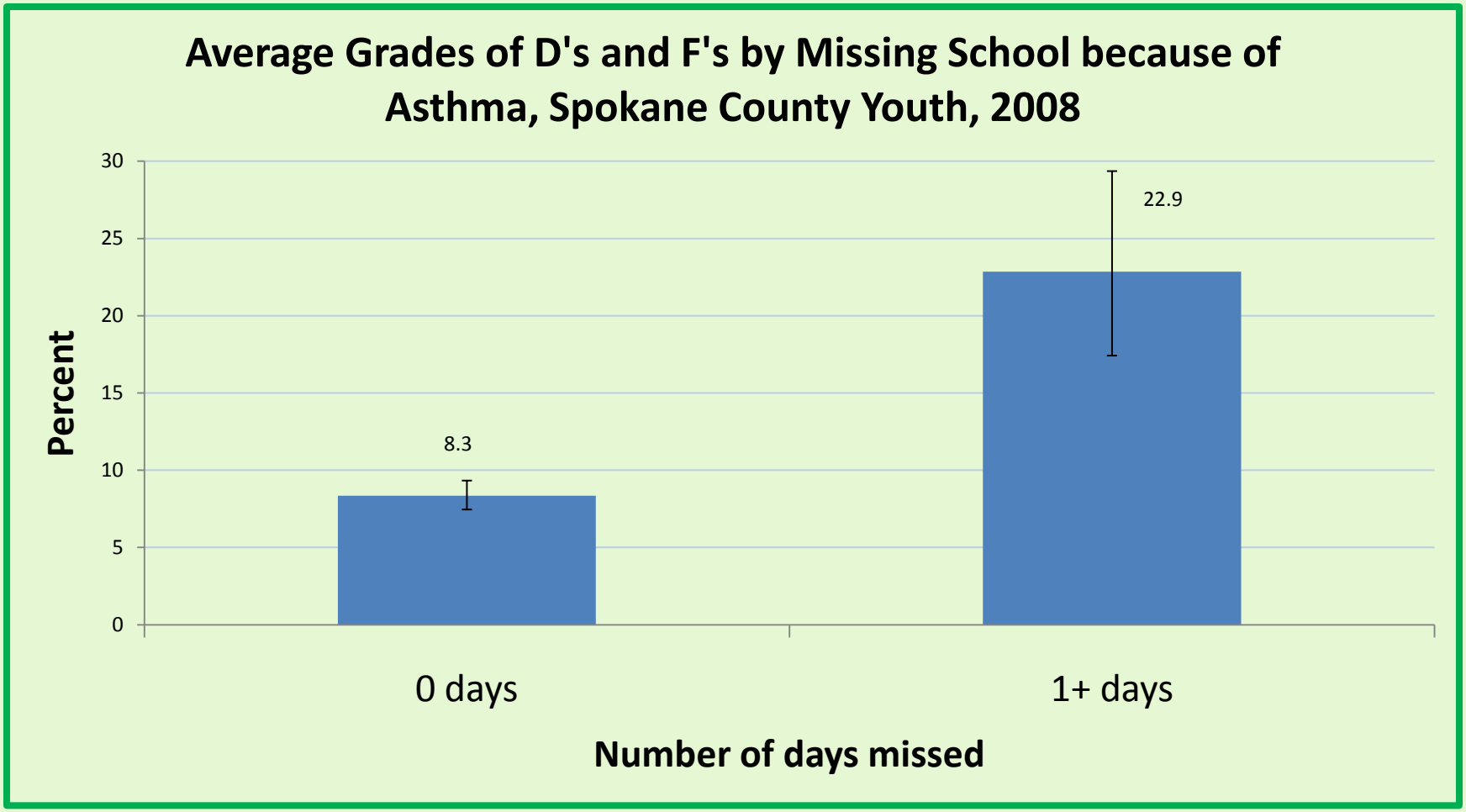
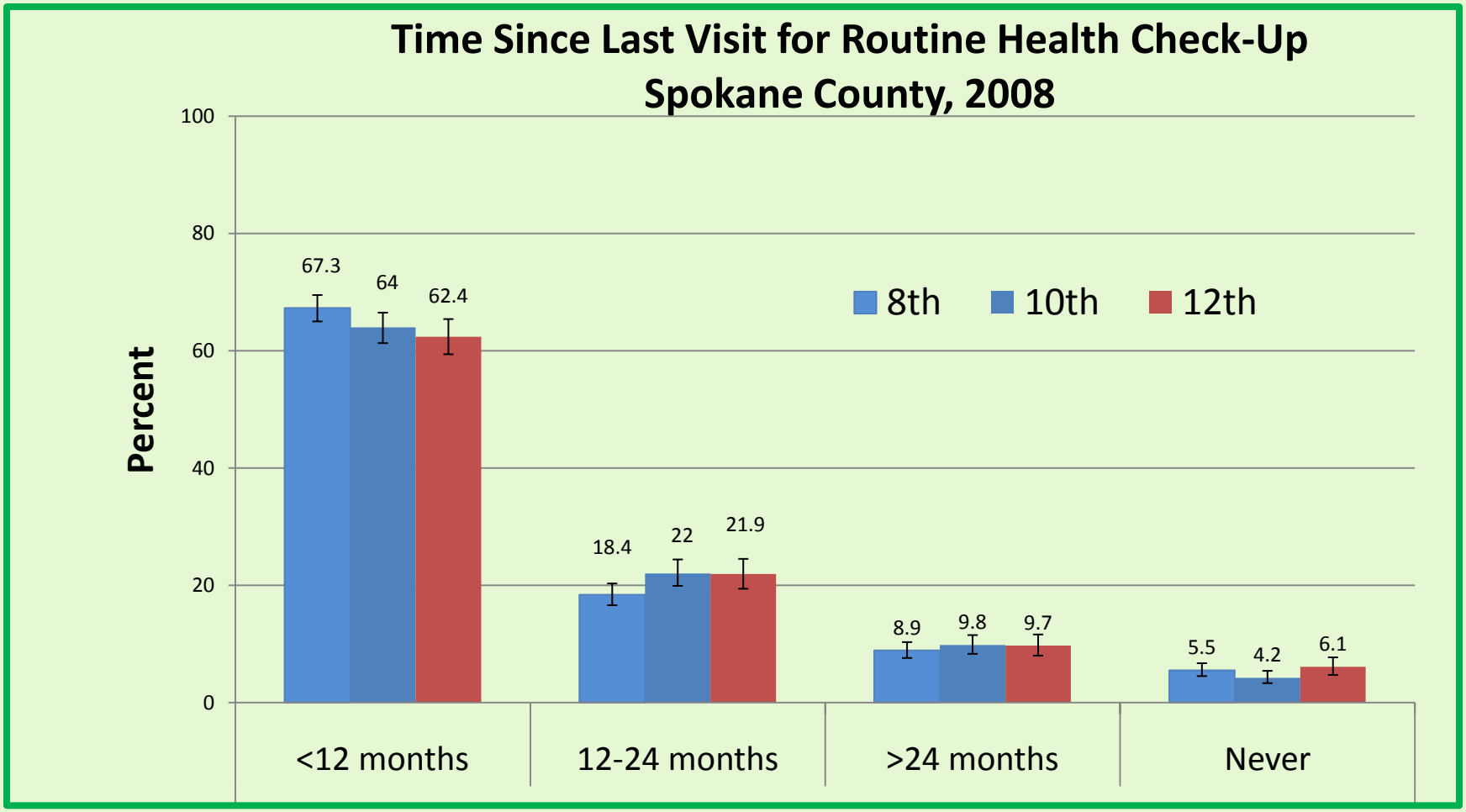


Source: Healthy Youth Survey

School-based Health Interventions



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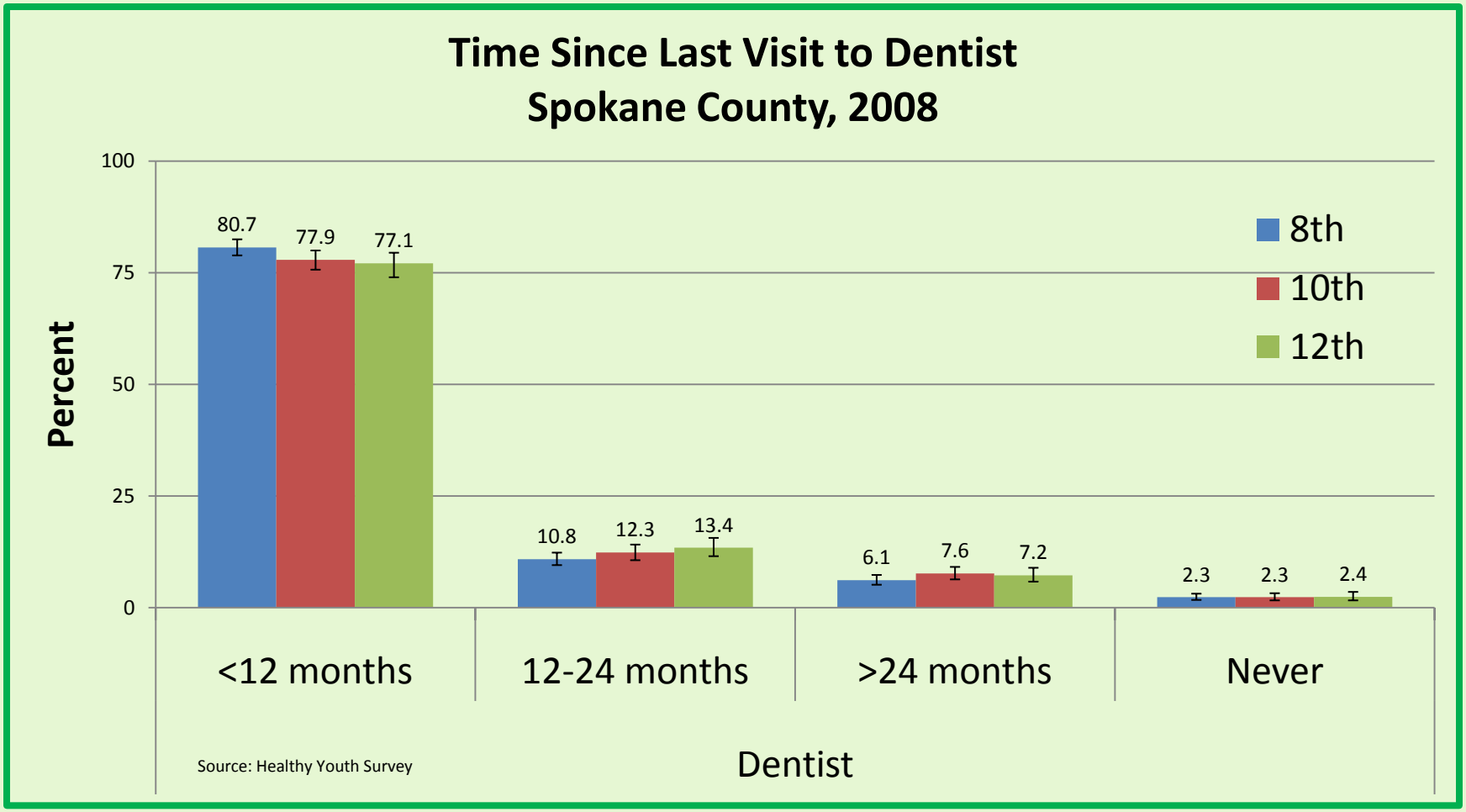

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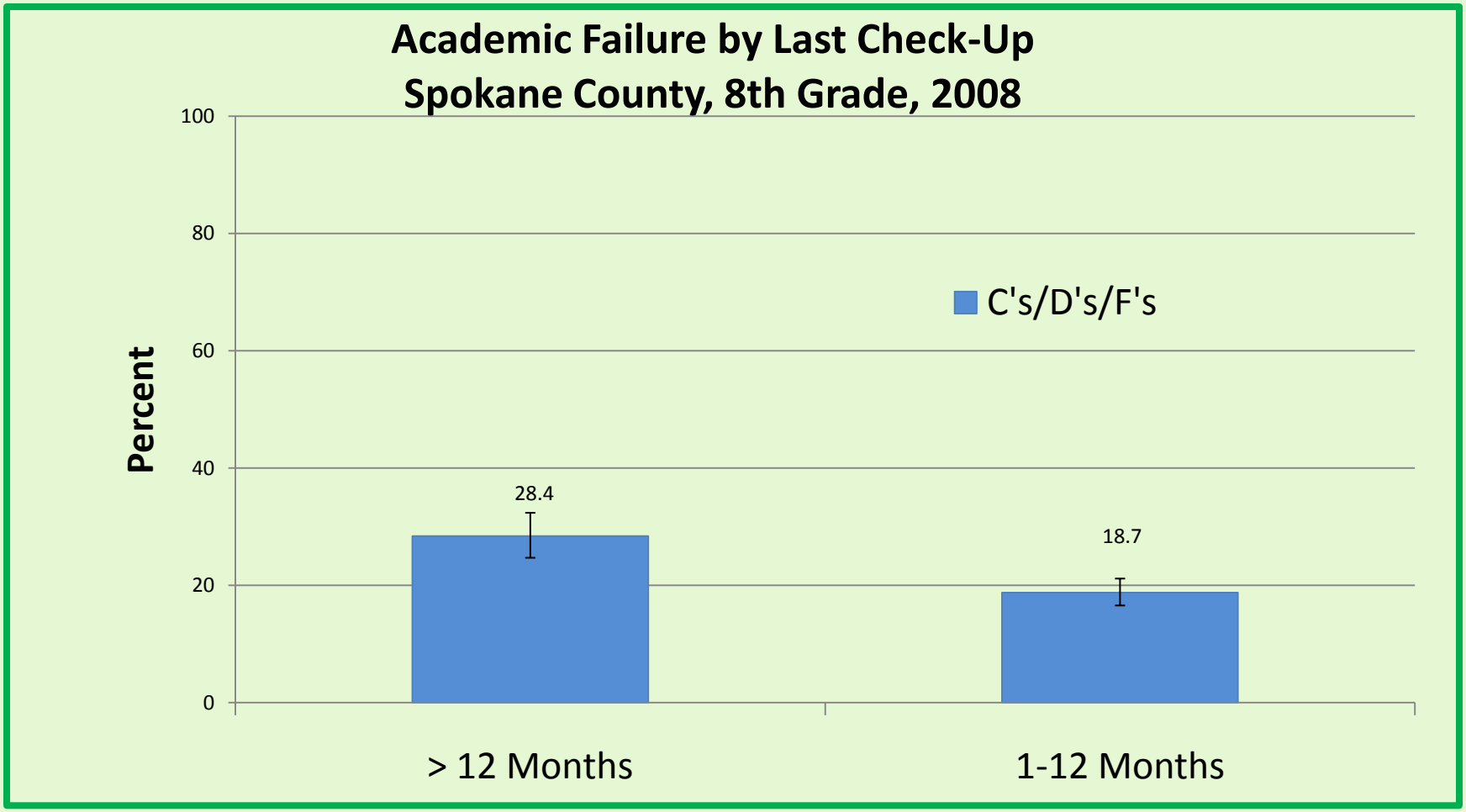

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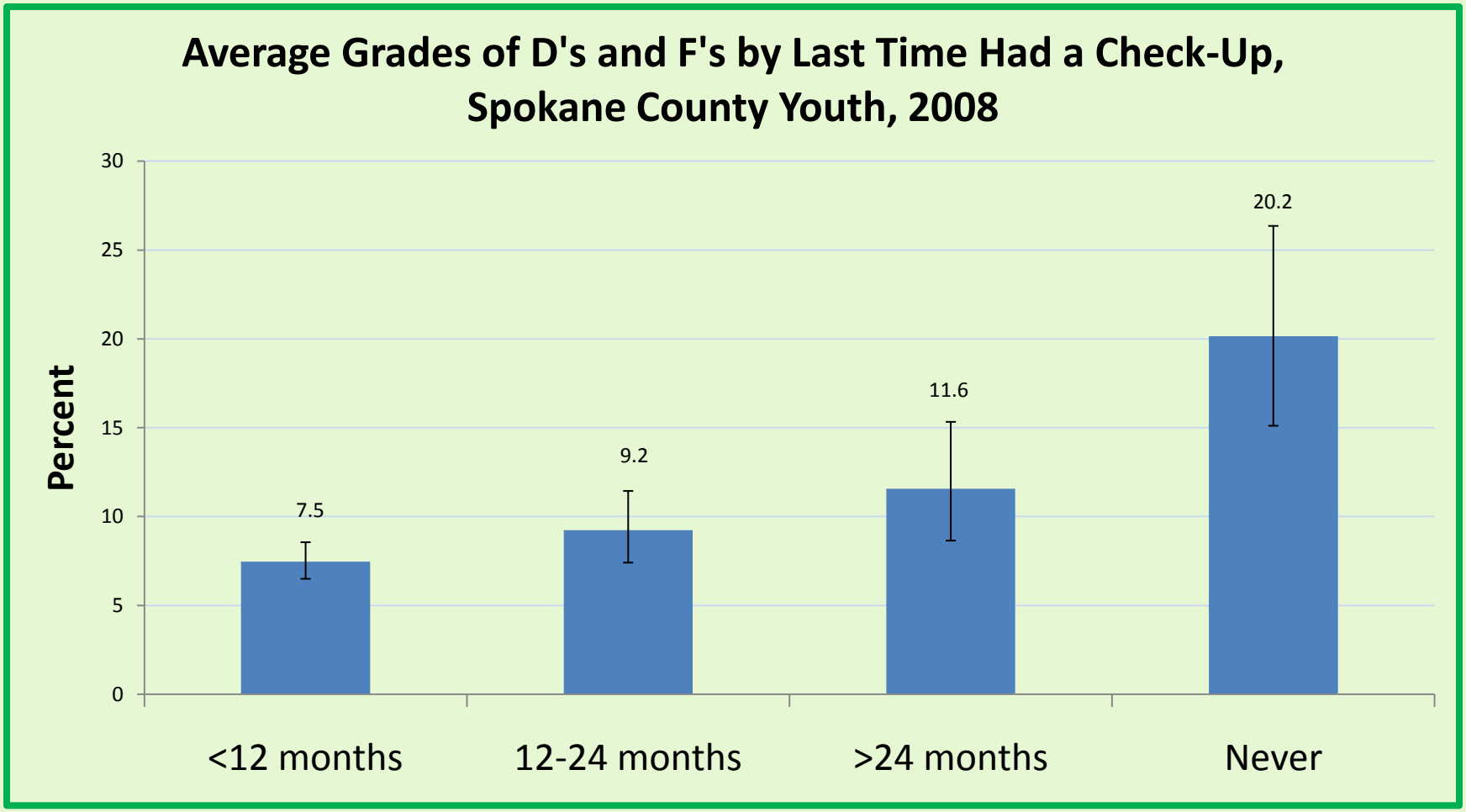

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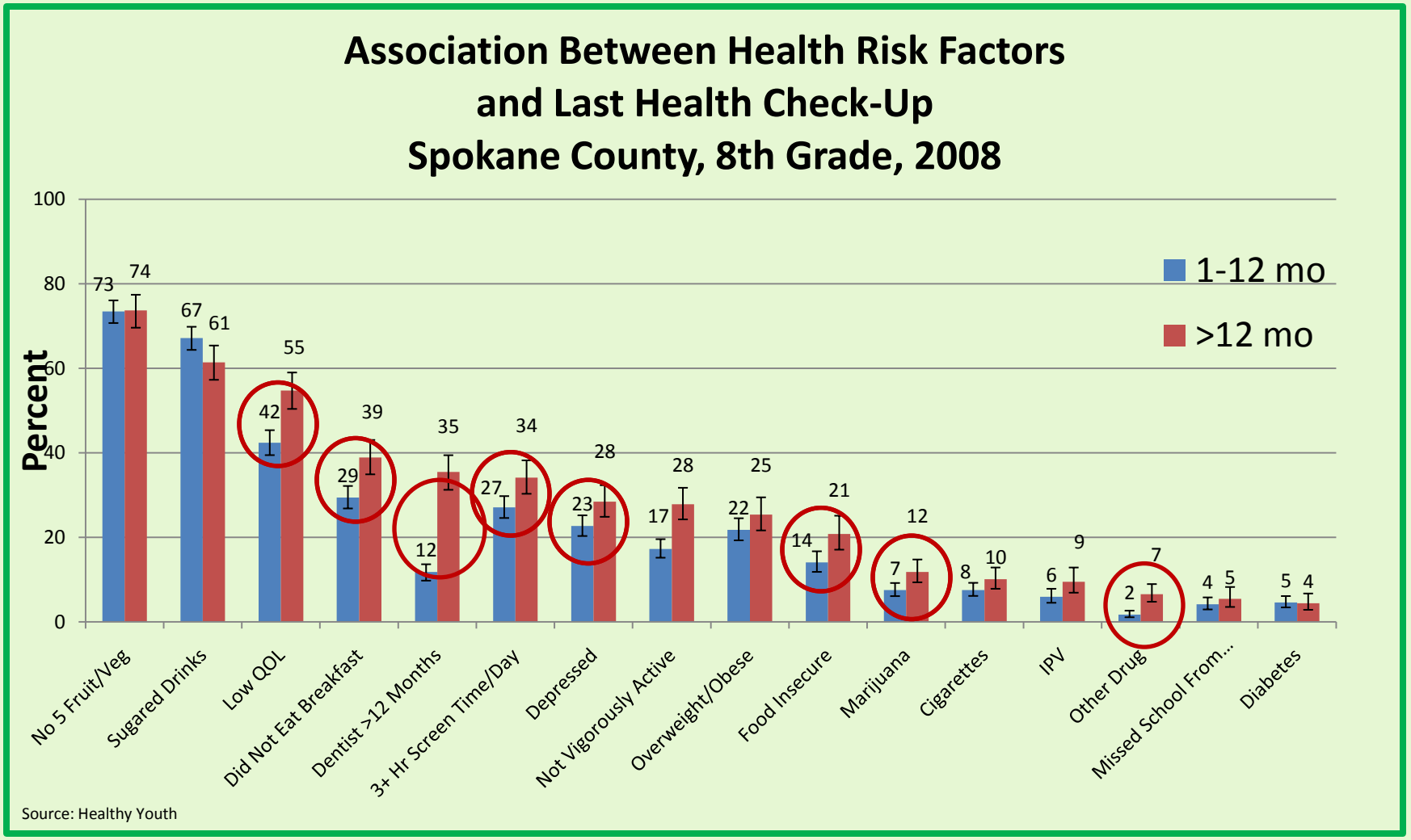


Source: Healthy Youth

School-based Health Interventions

- Priority Spokane Educational Attainment Research Project, *Enhancing Middle School Student Experiences: Strategies to Increase the Graduation Rate in Spokane Public Schools*, June 30, 2010
  - Recommendations for Social Support to Improve Educational Attainment:

School-based Health Clinics!

Summary

1. There is an association between health risk factors and academics; improving even one may help reduce academic risk.
2. There are ongoing and emerging health concerns of Spokane's children and youth.
3. Access to health care has potential to improve health *and academics.*

Conclusion

- If you build them, will they come?
  - 51% of teens report being likely or somewhat likely to use a SBHC.
  - Indication that higher risk teens would be more likely to use.

Teachers, staff, and principals have known all along that kids who are healthy learn better. Now this study proves it, down to how many cans of pop they drink, how much sleep they get, or how safe they feel at school. Now we can say confidently, if we tackle even just a few of these health issues, our children will do better in school.

- ***Randy Dorn, Washington Superintendent of Public Instruction***

Why Implement SBHCs?

The SBHC Solution

What is a School-Based Health Center? (NASBHC Definition)

SBHC Definition: Partnership created by schools and community health organizations to provide on-site medical, mental health, and/or oral health services that promote the health and educational success of school-aged children and adolescents.

Key elements:

- One of the partners, usually a health agency (community health center, hospital, local health department, mental health agency, or 501 C3 agency), or a school system, becomes the sponsoring agency.
- Services provided by the school-based health care team are determined locally through a collaborative process that includes families and students, communities, school districts, and individual and agency health care providers.
- The school-based health care team works in collaboration with school nurses and other service providers in the school and community.
- Although the model may vary based on availability of resources and community needs, SBHCs are typically open every school day, and staffed by an interdisciplinary team of medical and mental health professionals that provide comprehensive medical, mental health and health education services.

7 Principals of SBHCs (from the National Association of SBHCs)

Principal	Description
1. Supports the school	The school-based health center is built upon mutual respect and collaboration between the school and the health provider to promote the health and educational success of school-aged children.
2. Focuses on the community	The school-based health center is developed and operates based on continual assessment of local assets and needs.
3. Focuses on the student	Services involve students as responsible participants in their health care, encourage the role of parents and other family members, and are accessible, confidential, culturally sensitive, and developmentally appropriate.
4. Provides comprehensive care	An interdisciplinary team provides access to high quality comprehensive physical and mental health services emphasizing prevention and early intervention.
5. Advances health promotion activities	The school-based health center takes advantage of its location to advance effective health promotion activities to students and community.
6. Implements effective systems	Administrative and clinical systems are designed to support effective delivery of services incorporating accountability mechanisms and performance improvement practices.
7. Provides leadership in adolescent and child health	The school-based health center model provides unique opportunities to increase expertise in adolescent and child health, and to inform and influence policy and practice.

The range of common services differ, but are usually in one of 3 main categories

Primary Care Model

- NP/PA/MD 1-5 days/week
- Full or part-time (FT/PT) coverage
- No Mental Health/Substance Abuse Services

Staffing

- Medical provider (NP/PA/MD)
- School nurse (if present)

Primary Care-Mental Health Model

- PT or FT coverage
- Full Range of Prevention/Early Intervention Physical and Behavioral Health Services (age and developmentally appropriate, e.g. reproductive health)
- Diagnosis, Treatment and Management of Minor Acute/Chronic Illnesses
- Provision for after-hours care

Staffing

- Medical provider (NP/PA/MD)
- School nurse (if present)
- Mental Health provider (e.g.)
  - Clinical Social Worker,
  - Psychologist/Psychiatrist,
- May include Substance Abuse Counselor if appropriate

Primary Care-Mental Health PLUS Model

- FT coverage if possible
- Primary care and mental health plus one or more of the following:
  - Dental Services
  - Reproductive Health Services that include contraception dispensing/prescribing
  - Nutrition Counseling
  - On-site Substance Abuse Treatment

Staffing

- School Nurse
- Medical provider (NP/PA/MD)
- Mental Health provider
- Dentist/Dental Hygienist
- Addictions Counselor
- Nutritionist
- Health Educator
- Social Worker

Slide info from NASBHC

Typical services vary based on grade levels

All Grade Levels

- Primary Care including biennial risk assessment
- Immunizations
- Health Education
- Physical Examinations
- Mental Health
- Laboratory Services
- Medications
- Nutrition Counseling
- Vision, Hearing, and Dental Screening
- Social Services
- Chronic Disease co-management
- Specialty Care Referrals

High School

- Group counseling to address issues such as sexual abuse, depression
- Individual mental health counseling
- HIV testing and/or counseling
- Referral for family planning
- Pregnancy testing
- STD testing and treatment
- Reproductive health care

Slide info from NASBHC

The roles played by organizations in the community can differ, but involvement by all is needed to create successful SBHCs

Role \ Organization	Public Schools	Providers (e.g., GH, CHAS, Providence)	Medical Educators	WA State Health Agencies	Grantors (Private, State, Federal)	SBHC Non-profit (new or existing)	Community Members (incl. Parents)
Provide Physical Resources (Space, Equipment, etc.)	☑	☑				☑	☑
Provide Financial Support	☑	☑		☑	☑	☑	☑
Provide SBHC Staff or Drop-In Care Providers	☑	☑	☑			☑	
Run Day-to-Day Operations & Administration	☑	☑	☑	☑		☑	
Monitor SBHC Success	☑	☑	☑	☑	☑	☑	
Ensure SBHC compliance (HIPAA, consent, etc.)	☑	☑		☑		☑	
Obtain Financial Support	☑			☑		☑	

☑ = Organization can play this role

= Example SBHC models

School nurses and counselors are integral to the success of SBHCs

School nurses perform key mandated functions such as vision and hearing screening, immunization tracking, medical accommodations, daily health services, triage, and health education

Counselors often have responsibility for many non-mental health issues like class scheduling, college and career planning, and test coordination

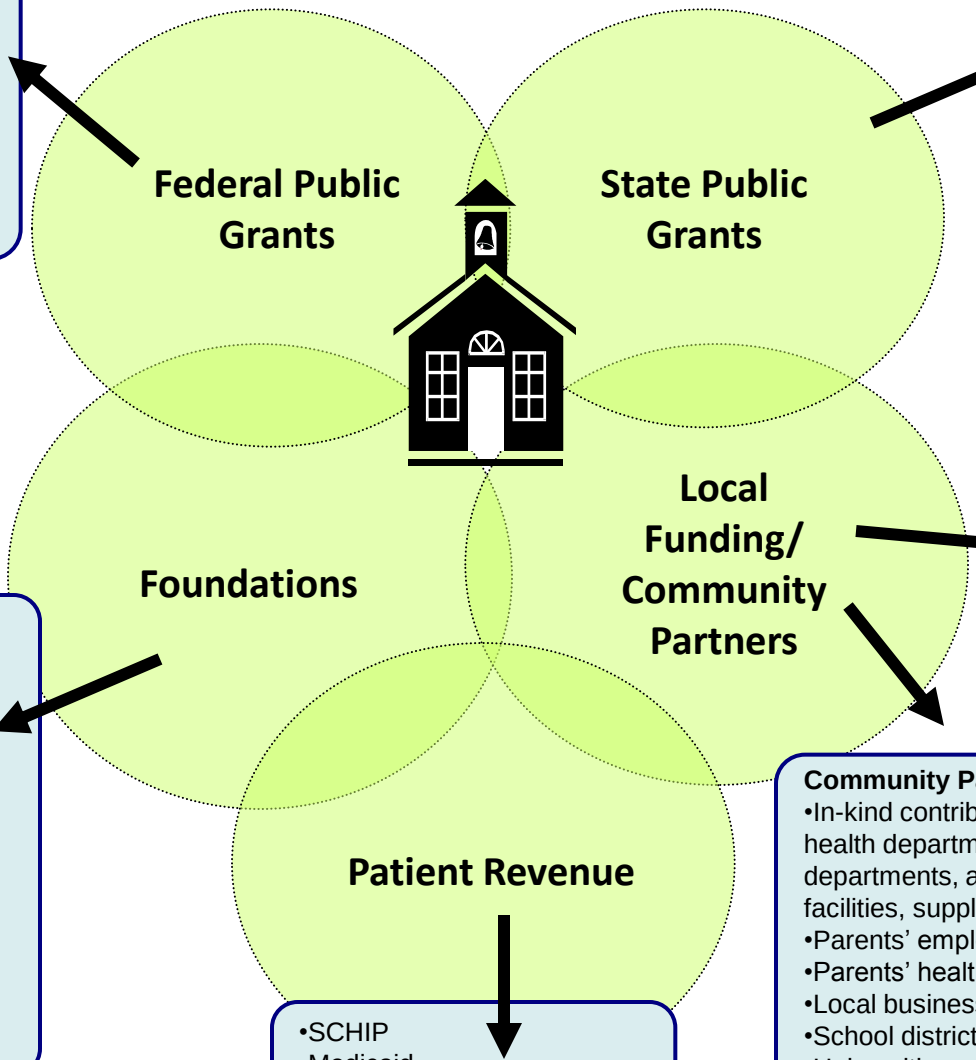
They are both members of the school-based health team which includes the SBHC, but usually continue to work outside the SBHC

Their role related to SBHCs is determined for each school, but is commonly:

- Serve as a liaison between the school-based health center and school staff
- Identify and refer students who can benefit from school-based health center services
- Provide follow-up
- Reach out to parents
- Help families identify public insurance options

School-Based Health Center Funding Models

Federal Grants:
•BPHC/FQHC (Section 330 of the Public Health Service Act)
•Title X of the Public Health Service Act: Family Planning
•HRSA New Access Point & SBHC Equipment Grants



Federal entitlement programs administered at the state level
•MCHB/Title V
•CDC HIV/AIDS Prevention
•SAMHSA/Title XIX (substance abuse and mental health screening and early intervention)
•Title XX/ Soc Services Block Grant (TANF, daycare, child neglect and abuse)
State Funding
•State General Revenue
•Tobacco Tax/Settlement
Education
•NCLB /ESEA (Title I improving academic achievement of the disadvantaged and Title IV safe and drug free schools)
•IDEA (health-related special education services)

Local Funding:
•Public and private grants (e.g., universities, United Way)
•City/county funds
•Local businesses (e.g., banks, insurance companies)

Foundations have or may support school-based health care in Spokane:
•Bill & Melinda Gates Foundation
•Empire Health Foundation
•HumanLinks Foundation
•Group Health Community Foundation
•Robert Wood Johnson Foundation
•W.K. Kellogg Foundation
•McKesson Foundation

Community Partners:
•In-kind contributions from schools, hospitals, health departments, community health departments, and community agencies (e.g., staff, facilities, supplies)
•Parents' employers
•Parents' health insurance agencies
•Local businesses
•School districts
•Universities

•SCHIP
•Medicaid
•Private insurance
•Patient fees

Chart from NASBHC

We are just beginning – there will be many decisions to make SBHCs work for Spokane County

Collaborative partnerships

Service and staffing options

Policy and procedures

Roles of school nurses and counselors

Referral networks

Delivery of service

Parental consent / parental involvement

Integration of the school-based health center with existing school and community resources

Confidentiality issues

Slide info from NASBHC

Why Implement SBHCs?

Benefits of SBHCs

What do we know intuitively?

Health has both direct and indirect effects on school success or failure

Healthy students make better learners – you can't teach a sick child

Students are more likely to seek care if they can "trip over it." Many students will find treatment and preventative services sooner. Disparities to health care access are greatly reduced

- 75% of students who used SBHCs in one survey said they were receiving services they otherwise would not get
- Research has shown a 20% increase in recent health care visits for students with access to an SBHC
  - 1996 Mathematica Policy Research
- SBHCs have shown significantly higher immunization rates
  - American Journal of Public Health, Federico et al, Vol 100 no. 9, Sept 2010

A child who succeeds in school is more likely to enjoy lifelong health

Slide info from NASBHC

What does research say about emergency room use, hospitalization, and SBHCs?

Reduced inappropriate emergency room use, increased use of primary care, and fewer hospitalizations

- Santelli J, Kouzis A, et al. Journal of Adolescent Health 1996; 19:267-275

- Adolescents with Medicaid in Denver were four time less likely to access urgent and emergency care if they used SBHCs
  - Kaplan DW et al. Managed care and SBHC. Arch Pediatric Adolescent Med. 1998 Jan; 152

The annual hospitalization cost per student in Cincinnati schools with SBHCs was 85% less than those without

- Guo JJ et al. Impact of SBHCs on Children with Asthma 2005: 37 no 4: 266-274

Prevention-oriented care in SBHCs results in decreased utilization of emergency departments

- Key JD, Washington EC, and Hulsey TC, Journal of Adolescent Health 2002: 30;273

Slide info from NASBHC

What does research tell us about asthma and SBHCs?

50% reduction in asthma related emergency room visits for students enrolled in SBHCs in New York City

- Webber MP et al. Archives of Pediatric and Adolescent Medicine. 2003; 157: 125-129

75-85% decrease in hospitalization rates related to asthma

- Lurie N, Bauer EJ, Brady C. Asthma outcomes in an inner-city SBHC. Journal of School Health. 2001

$3 million savings in asthma-related hospitalization costs for students enrolled in SBHCs in New York City

- Analysis by the Empire Health Group for the NY Coalition of School-Based Primary Care, 2005

Slide info from NASBHC

What does research tell us about mental health and SBHCs?

Harder-to-reach populations, especially minorities and males, are more likely to receive crucial services such as mental health care and high risk screen

- Kaplan D, et al. Archives of Pediatric and Adolescent Medicine. 1998; Jan;152(1):25-33.

Adolescents were 10-21 times more likely to come to a SBHC for mental health services than a community health center network or HMO

- Juszczak L, Melinkovich P, Kaplan D. Journal of Adolescent Health 2003; 32S:108-118.

Dallas SBHCs found that mental health services helped decreased discipline referrals by 85%

- Dallas Youth and Family Centers Program: Hall, LS (2001) Final Report

Slide info from NASBHC

Efficiencies in SBHCs

Parents time off work is reduced

- This effect combined with other social benefits was estimated at $3.35 for every $2 spent on centers in Cincinatti
  - Guo et al, American Journal of Public Health, Sept 2010, Vol. 100, No. 9

Follow-up is less labor intensive

Students spend more time in school

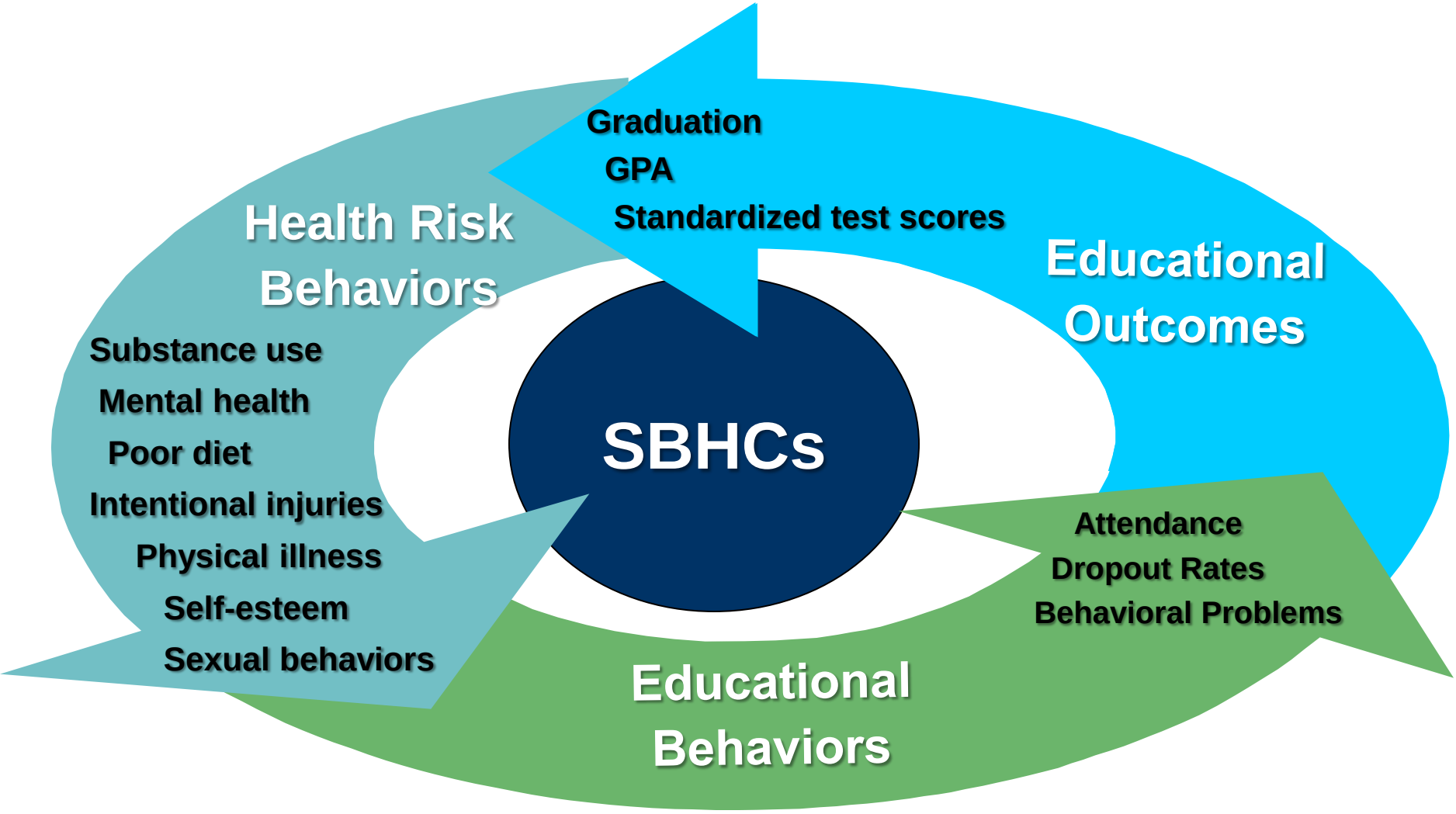
- A recent study showed reduced early dismissal and a 3x reduction in lost class time for health services
  - Van Cura, Journal of School Health, Aug 2010, Vol. 80, Iss. 8; p 371

Health concerns are identified earlier

More costly emergency room visits and hospitalizations are reduced

Slide info from NASBHC

The Cycle of Health and Education



Geierstanger, S. P., & Amaral, G. (2004). School-Based Health Centers and Academic Performance: What is the Intersection? April 2004 Meeting Proceedings. White Paper. Washington, D.C.: National Assembly on School-Based Health Care.

The number of SBHCs is growing rapidly (200 added from 2004/5 to 2008/9), but not yet in the Spokane area

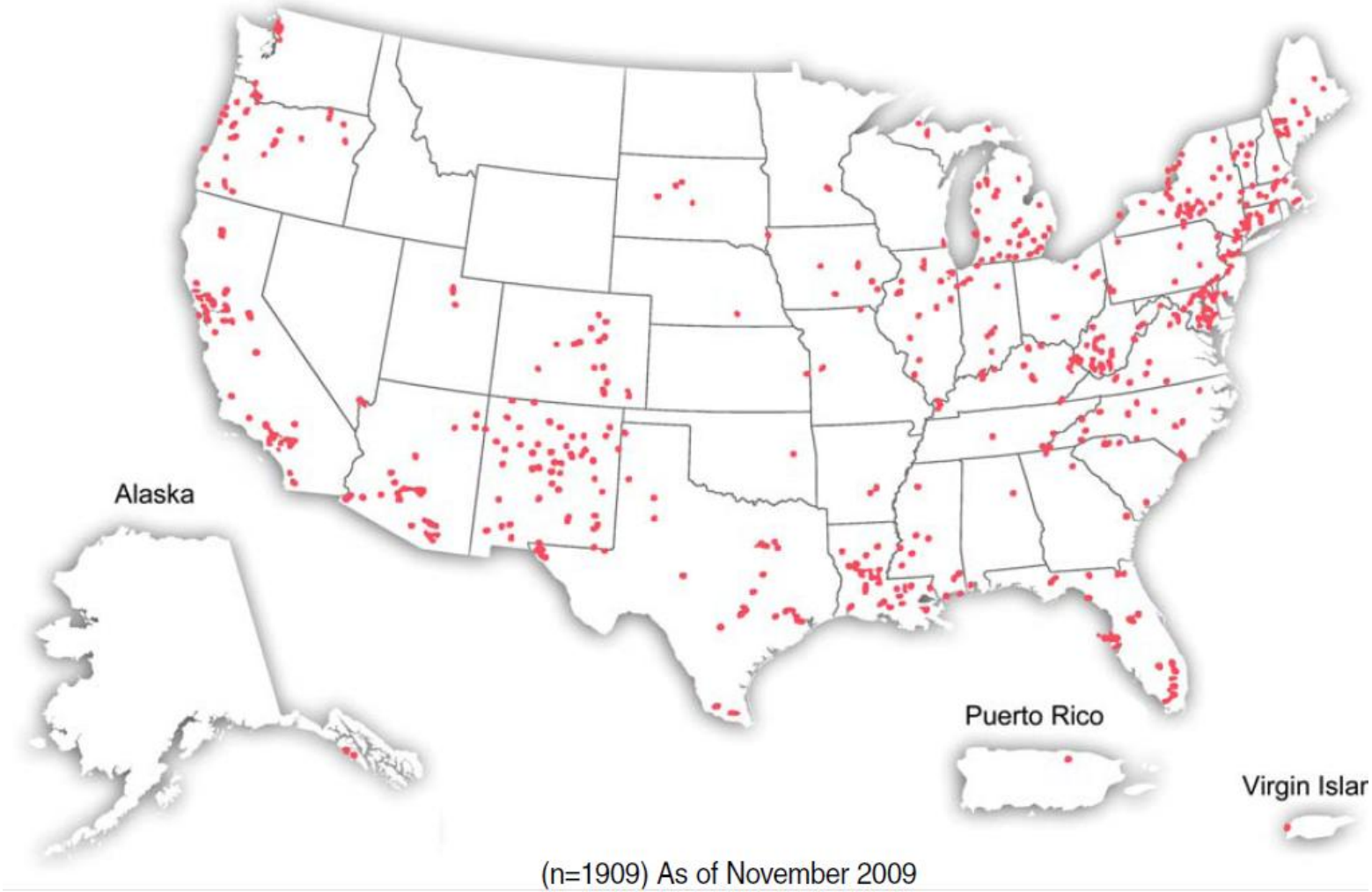


Chart from NASBHC

Seattle's SBHC Experience

TJ Cosgrove, LICSW

Community & School-Based Partnerships

Public Health
Seattle & King County

History & Timeline

1987: Seattle school district and public health officials agree to target Rainier Beach High School for piloting school-based primary care

1988: Public Health opened Washington State's first school-based health center at Rainier Beach in September

1991: Seattle voters passed the first Families and Education Levy, providing funds to expand school-based health centers

History & Timeline

1992-96: Seven high school SBHCs open

1998: Seattle voters renew the Families and Education Levy, and the school-based model began to expand and adapt to middle school student needs

1998-2004: Six additional SBHCs open. School-based health center services available at all Seattle comprehensive public high schools and at four select middle schools

2010: Seattle's 14 school-based health centers serve over 5,500 students each year, providing a full range of medical care and mental health services

How did we get here?

City of Seattle Families and Education Levy

Currently in its third, seven-year cycle (1991, 1998, 2005)

$119 million (about $17 million per year)

Focused investments on increasing measurable academic outcomes and closing the achievement gap for students in Seattle

Investment areas include: Early Learning, Family Support, Community Learning Centers, Middle School Innovations, Ninth Grade Transition, and Student Health

How did we get here?

Families and Education Levy Investment in Student Health

$4.1 million annually

- $3 million for SBHCs
- $700K for school nursing
- $400K for administration/investment management

How did we get here?
Committed, Diverse, Leveraged Partnerships (a sampling)

City of Seattle

Group Health Foundation

Group Health Cooperative

Harborview Medical Center

Horizons Foundation

HumanLinks Foundation

International Community Health Services

King County

National Assembly on School-Based Health Care

Neighborcare Health

Nesholm Family Foundation

Odessa Brown Children's Clinic

Public Health – Seattle & King County

Robert Wood Johnson Foundation

Seattle Children's Hospital

Seattle Public Schools

Swedish Medical Center

The Center for Health and Health Care in Schools

University of Washington Department of Child and Adolescent Psychiatry

University of Washington Medical Center

University of Washington Div of Public Behavioral Health & Justice Policy

University of Washington School of Nursing

Washington State Department of Health

Seattle's SBHC System

14 SBHCs: **10 Comprehensive HS**

4 Comprehensive MS

No elementary schools….yet

Public Health-Seattle & King County serves as program manager

Four additional health care organizations serve as SBHC "sponsors"

School District and City are key partners

SBHC Sponsors & Sites

Sponsor: Group Health Cooperative

- Aki Kurose MS
- Franklin HS
- Nathan Hale HS
- Washington MS

Sponsor: Neighborcare Health

- Denny MS
- Madison MS
- Roosevelt HS
- Sealth HS
- West Seattle HS

Sponsor: Public Health Seattle & King County

- Cleveland HS
- Ingraham HS
- Rainier Beach HS

Sponsor: Swedish Medical Center

- Ballard HS

Sponsor: SCH Odessa Brown Children's Clinic

- Garfield HS

SBHC Operating Costs

Operating costs of a Seattle High School SBHC is approximately $300-350K

Pays for a provider/program staff, medical equipment/supplies, pharmacy, other operating expenses, and indirect costs

The cost of the clinics in Seattle schools is borne by the following sources:

- City levy – 69%,
- third-party reimbursements (Medicaid, private insurance, etc.) – 10%,
- contributions form SBHC sponsoring organizations – 18%,
- other miscellaneous revenue – 3%

Why do sponsors sponsor?

A commitment to system level goals:

- Healthy communities
- Healthy adolescents
- Educational outcomes

Organizational mission/business

- Community benefit
- Appropriate use
- Access point for adolescent enrollees
- Target population
- New enrollees/patients

Seattle's SBHC Model

Staffing: **1.0 FTE Mid-Level Practitioner (NP/PA)**

1.0 FTE MH Counselor

1.0 FTE Administrative Support

Middle schools have a .5 FTE medical provider

Some sites offer "enhanced" services (health education, nutrition, naturopathic medicine)

Partnering with School Staff

School Nurses

- Essential to SBHC programs
- SBHCs are a quick, responsive, known referral source for SNs
- SNs provide triage, connection to school, population-based care for SBHCs

Counselors, Special Education, Teachers, Administrators, etc

HIPAA - FERPA

SBHC Scope of Services

Primary Care Services:

- Preventive healthcare including immunizations and well-child care
- Primary and acute health care assessment, diagnosis, treatment and referral
- Age appropriate reproductive health care/family planning
- Screening and treatment for sexually transmitted diseases
- Mental health screening, counseling, case management, and referral
- Health education and health promotion
- Care coordination and referral for drug/alcohol services and dental care

Interventions and strategies that support school success:

- Standardized behavioral and health risk assessment
- Mental and behavioral health interventions
- Medical evaluation and intervention
- Facilitating on-going peer support groups
- Facilitating communication on students' behalf within school communities
- Linkages and coordination with community organizations
- Referral to substance abuse services
- Linkage to tutoring and academic support.

Seattle SBHC User Demographics
Sep 2008-Jun 2009

	Asian	Black	Hispanic	Native American	White	Free/ Reduced Lunch	LEP	Total Unique Users
SBHC System Total	1132	1590	709	129	1607	2775	670	5167
SBHC User	21.9%	30.8%	13.7%	2.5%	31.1 %	53.7%	13.0 %	
School Enrollment (10/2008)	25.5%	22.6%	11.4%	1.9%	40.3 %	38.5%	11.3%	

SBHC Use by Gender

Overall, 60-65% of all SBHC users are female.

Male participation in SBHC services more closely balances females at the four middle school SBHCs.

SBHC Services 2009-10

5,590 total users

- 5,507 had a visit to a medical provider
- 1,639 had a visit to a MH counselor

30,893 total visits

- 7,723 medical
- 13,170 mental health

Productivity (85% of total student days)

- 9.9 medical visits per day
- 6.4 mental health visits per day

Diagnoses & Procedures

Most common reasons for MH visit

- Academic difficulties
- Family problems
- Depressive disorders

Most common reasons for Med visit

- Well-child medical exam/check up
- Contraceptive counseling
- Respiratory illness
- Vaccinations
- Dietary/exercise issues

School-Based Health Outcomes

Selected FEL Targets and Indicators

2,364 students received support for chronic conditions

7,388 students brought into compliance with required immunizations

1,306 12th-grade students assisted by SBHCs and school nurses graduated (08-09)

School-Based Health Outcomes

Two studies, conducted by researchers at the University of Washington, found that student use of SBHCs is positively related to academic outcomes, including grade-point average, attendance, and graduation.

More detailed information about these studies is available from Suzanne Kerns, Ph.D.; sekerns@uw.edu; (206)685-2766. Additionally, Study 1 has been published in a peer-reviewed journal: Walker, S.C., Kerns, S.E.U., Lyon, A.R., Bruns, E.J., & Cosgrove, T.J. (2010). Impact of school-based health center use on academic outcomes. *Journal of Adolescent Health, 46,* 251-257. Study 2 is currently under review at a peer-reviewed journal. The UW research team includes: Suzanne Kerns, Sarah Walker, Michael Pullmann, Aaron Lyon, and Eric Bruns.

Academic Outcomes: Study 1

A study following high-risk 9th graders across five semesters (Fall 2005-Fall 2007) found, compared to demographically similar non-users:

- Students who used SBHCs for medical purposes had a relative increase in attendance.

- Students who used SBHCs for mental health purposes had a relative increase in GPA.

Academic Outcomes: Study 2

A study of all Seattle Public School students starting in 9th grade and across eight semesters found, compared with demographically similar non-users:

- Students using SBHCs a low to moderate amount had a 33% reduction in dropout.
- Students using SBHCs at a high amount did not show a different rate of dropout
- Exploratory analyses indicate that students at higher risk for dropout (i.e., free/reduced lunch, GPA <2.5, attendance <90%, African American or Hispanic ethnicity) experienced greater benefits related to SBHCs.

SBHC Usage and Graduation

Low and Moderate SBHC usage was related to increased rates of graduation

- This was true when using raw data and after applying statistical controls

During the "average" semester, low and moderate users of SBHC are 33% less likely to drop out than non-users

- Of those SBHC low and moderate users who did drop out, they dropped out on average a semester after non-users

No statistically significant difference in probability of dropout for high users

Possible buffering effects of SBHC

Significant risk categories for dropout included: free/reduced lunch status, low GPA, low attendance, African American/Hispanic, special education, disciplinary actions

SBHC usage may help to ameliorate the relationship between these risk factors and dropout

Preliminary analyses revealed that low amounts of SBHC usage was related to less dropout across nearly all types of students

However, moderate and high usage was differentially associated…

Possible buffering effects of SBHC

For combined moderate and high use categories, compared to no use:

- Reduced/free lunch: ~41% less likely to dropout
- No reduced/free lunch: no significant differences

- GPA < 2.5: ~34% less likely to dropout
- GPA > 2.5: no significant differences

- Attendance < 90%: ~47% less likely to dropout
- Attendance > 90%: no significant differences

- African American: ~43% less likely to dropout
- Hispanic: ~59% less likely to dropout
- White: no significant differences
- Asian: no significant differences

- No differential effects for those in special education or with disciplinary actions

More Outcomes

2001 Student User Survey

Over 70% of students report that they obtained care at the SBHCs that they otherwise would not have received

90% of student users reported that being able to get healthcare at school helped them to be more attentive when they were in class

78% of student users reported an improvement in their health as a result of using the SBHC at their school

87% of student users said they know how to take better care of their health as a result of contact they have had with staff of the SBHC

More than 80% of student users reported that they were more knowledgeable and better able to access health and mental health services as a result of the SBHC

More Outcomes

Lower Chlamydia Rates and Birth Rates in Adolescent Females Coincide with the Establishment of Teen Health Centers in King County, WA

T Shafii[1,2], RP Kerani[1,2], B Strelitz[1], MR Golden[1,2] U of Washington[1] and Public Health Seattle & King County[2]

Public Health Seattle & King County

ABSTRACT

Background. Over the past two decades, Seattle public schools have established in-school Teen Health Centers (THCs) designed, in part, to improve adolescents' access to reproductive healthcare. No other school district in King County, WA has similar THCs.

Objectives. The purpose of this study is to evaluate the possible impact of these clinics on Chlamydia (CT) and birth rates in adolescents within the Seattle School District.

Methods. This is an ecological study of 1990-2006 WA State Department of Health surveillance data comparing CT rates and General Fertility Rates (GFR) of 15-19 year-old females in Seattle to other school districts in King County, WA.

Results. Over 15 years the CT rate dropped from 3349 to 2060 per 100,000 in Seattle and from 2227 to 2066 per 100,000 in other King County school districts. The average change in rate of decrease was significant for Seattle [-87.4 (95% CI -126.5, -48.2)], but not other districts. During this time the GFR dropped form 37.5 to 13.6 per 1000 in Seattle and from 37.5 to 28.7 per 1000 for other school districts. The rate of decrease was greater in Seattle than the other districts (p=.03).

Conclusions. While these results should be interpreted with the inherent limitations of ecological studies, they are consistent with the hypothesis that the establishment of THCs decreased rates of chlamydial infection and birth rates among adolescents.

Implications. This study is a first step in effectiveness assessments of school-based clinics and a more definitive study is needed. Proving the degree of THC effectiveness has potential implications for the programmatic approach to adolescent healthcare delivery.

BACKGROUND

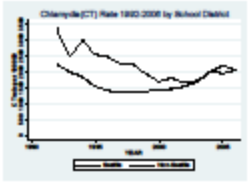
- Adolescents have high rates of Chlamydia *trachomatis* (CT) infection and unintended pregnancy
- Their access to healthcare is limited by lack of health insurance, ability to pay, transportation, and confidentiality from family.
- Teen Health Centers (THC) located within schools remove these barriers and provide adolescents with access to healthcare.
- In 1989 the first THC was established in the Seattle School District. There are now THCs in all Seattle Public School high schools.
- Funding for these clinics is potentially insecure and is dependent on voter support of city levies.

METHODS

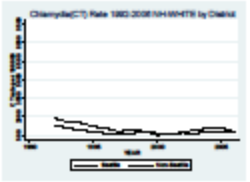
- Ecological study using WA State Department of Health surveillance data from 1990-2006.
- Data grouped as Seattle School District and Non-Seattle (comprised of 17 other school districts).
- Chlamydia and general fertility rates (GFR) for 15-19 yr old females weighted for population estimates and standardized for race/ethnicity distributions for Seattle School District.
- GFR data sorted by school district; CT data estimated for Seattle district vs. other districts based on zip code data.
- Differences assessed using linear regression.

RESULTS

Estimated change per year of Chlamydia Rates per 100,000 for Non-Hispanic(NH)-Whites, NH-Blacks, and Hispanics

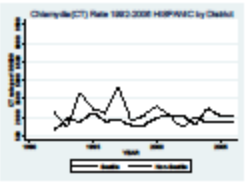


Seattle: CT ↓ from 3349 to 2060
[-87.4 (95% CI -126.5, -48.2) p<0.0001].
Non-Seattle: CT ↓ from 2227 to 2066
[7.8 (95% CI -31.3, 47.0) p=ns].
Rate of decrease greater in Seattle p=0.002.



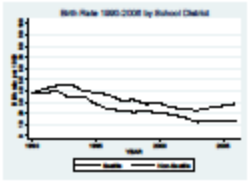
Seattle NH-Whites: CT ↓ from 1868 to 780
[-71.5 (95% CI -98.9, -44.0) p<0.0001].
Non-Seattle NH-Whites: CT ↓ from 1360 to 851
[-7.7 (95% CI -35.2, 19.8) p=ns].
Rate of decrease greater in Seattle p=0.002.

Seattle NH-Blacks: CT ↓ from 9353 to 7488
[-119.2 (95% CI -234.2, -4.2) p=0.04].
Non-Seattle NH-Blacks: CT ↓ from 5998 to 6981
[73.2 (95% CI -41.8, 188.3) p=ns].
Rate of decrease greater in Seattle p=0.02.

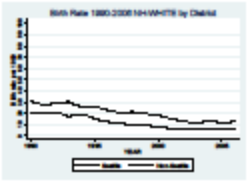


Seattle Hispanics: CT ↓ from 2473 to 1691
[-86.2 (95% CI -167.5, -5.0) p<0.04].
Non-Seattle Hispanics: CT ↑ from 993 to 2148
[49.3 (95% CI -32.0, 130.6) p=ns].
Rate of decrease greater in Seattle p=0.02.

Estimated change per year of General Fertility Rates per 1,000 for Non-Hispanic(NH)-Whites, NH-Blacks, and Hispanics



Seattle: GFR ↓ from 37.5 to 13.6
[-1.8 (95% CI -2.15, -1.49) p<0.0001].
Non-Seattle: GFR ↓ from 37.5 to 28.7
[-1.3 (95% CI -1.64, -0.98) p<0.0001].
Rate of decrease greater in Seattle p=0.03.



Seattle NH-Whites: GFR ↓ from 20.1 to 5.5
[-1.13 (95% CI -1.31, -0.95) p<0.0001].
Non-Seattle NH-Whites: GFR ↓ from 31.0 to 12.3
[-1.32 (95% CI -1.51, -1.14) p<0.0001].
Rate of decrease not different between districts.

Seattle NH-Blacks: GFR ↓ from 96.9 to 33.6
[-4.68 (95% CI -5.77, -3.60) p<0.0001].
Non-Seattle NH-Blacks: GFR ↓ from 58.5 to 53.3
[-3.28 (95% CI -4.36, -2.19) p<0.0001].
Rate of decrease not different between districts.

Seattle Hispanics: GFR ↓ from 62.8 to 37.0
[-2.11 (95% CI -3.06, -1.16) p<0.0001].
Non-Seattle Hispanics: GFR ↑ from 50.9 to 104.9
[2.06 (95% CI 1.11, 3.01) p<0.0001].
Rate of decrease greater in Seattle p<0.0001.

SUMMARY

- Chlamydia (CT) rates decreased significantly overall and for NH-Whites, NH-Blacks and Hispanics in Seattle schools.
- Although not statistically significant there was an increase in CT rates for NH-Blacks and Hispanics in Non-Seattle districts.
- General fertility rates (GFR) decreased significantly in both Seattle and Non-Seattle school districts for NH-Whites and NH-Blacks and Hispanics in Seattle schools.
- GFR for Hispanics in Non-Seattle schools showed a significant increase.

LIMITATIONS

- Ecological study design precludes definitive assessment of causality
- Data unavailable to assess for other predictors of change in CT rates and GFR.
- CT rates for Seattle versus Non-Seattle school districts estimated by corresponding zip codes, however there is some overlap between school districts and zip code area.
- Specific outcome data from THC's unavailable.

CONCLUSIONS

- The disparate trends in chlamydial infection rates and GFRs we observed comparing areas served by the Seattle Public Schools and other King County, WA school districts is consistent with the hypothesis that THCs have improved reproductive health.
- Studies are needed to more definitively establish the reproductive health impact of Teen Health Centers.

The Most Important Outcomes

"I think having a teen health center at my school is very helpful to me and for others. I like it because they provide me with info and health care that I wouldn't feel comfortable asking my doctor or mom for". **9th grade female**

"I really like coming here. If it were not for the Center I would be in extremely bad shape." **12th grade female**

"I love the Teen Health Center. It's convenient because I don't have to take a lot of time off of school to get an appointment" **11th grade female**

"Thanks for saving my life!" **10th grade male**

Challenges - $$$$

There is no “silver bullet” funding strategy

Third party reimbursement

- Kids and families do not pick their school based on their health plan
- Confidential services – EOBs

You are a health program, we fund education…

You are an education program we fund health…

Challenges – Managing Expectations

Community perceptions

Limited capacity in the presence of significant need

Moving the “big needles” of educational and health outcomes

Challenges – Assuring Quality

School-based health care is an atypical model

Different organizations, different approaches

Quality school-based health care and stakeholder agenda are not always the same thing

Appropriate information sharing

Keys to Success

Leveraged support, resources, funding

Broad consortium of community partners and stakeholders

Uphold system and partner missions

The links between health and education

Demonstrate results and evidence

Connect with the national and state SBHC movements

Establish system leadership

Keys to Future Success

SBHCs are a strategic component of Health and Education reform

A Washington state voice for SBHCs can create opportunity and resources

The "third leg of the stool" – Economic Development

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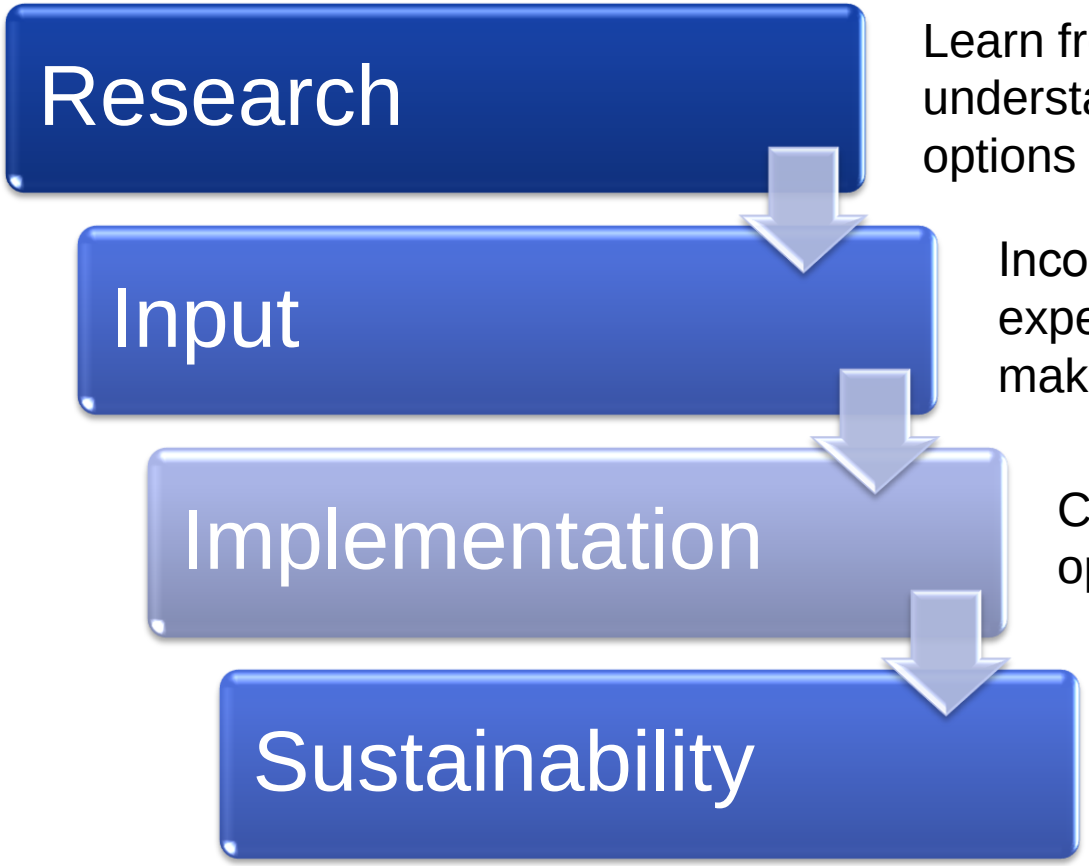
Project Approach & Timeline

The project has four overlapping phases of work



Learn from successful SBHCs & understand operating model options in depth

Incorporate our community's expertise, needs, and resources in making key decisions

Create a detailed plan to fund and open a pilot SBHC

Identify a path to long term financial stability and further rollout of SBHCs in the area

Key questions for the Research Phase

Research

- What are the characteristics of successful models around the country and in our state?
- Specifically, do these models use existing agencies to run a clinic in a school?
- What are the staffing levels and personnel typically needed to operate a clinic: doctors, nurses, mental health professionals, and dentists?
- What levels of services are commonly provided?
- What are the typical struggles seen when starting a SBHC?
- What are the most effective implementation strategies?
- How are school-based health clinics successfully funded nationwide?

Research questions will be answered through a combination of publication review, discussions with stakeholders, and on-site visits to Northwest clinics

A summary report will be disseminated and reviewed in November

Input Phase Approach

Input

A subset of this group (with additions and substitutions) will form the basis of an Advisory Committee

- The Committee will generally meet monthly and be the primary input source to the planning project

Community surveys and forums will help inform specific needs in areas likely for a pilot SBHC

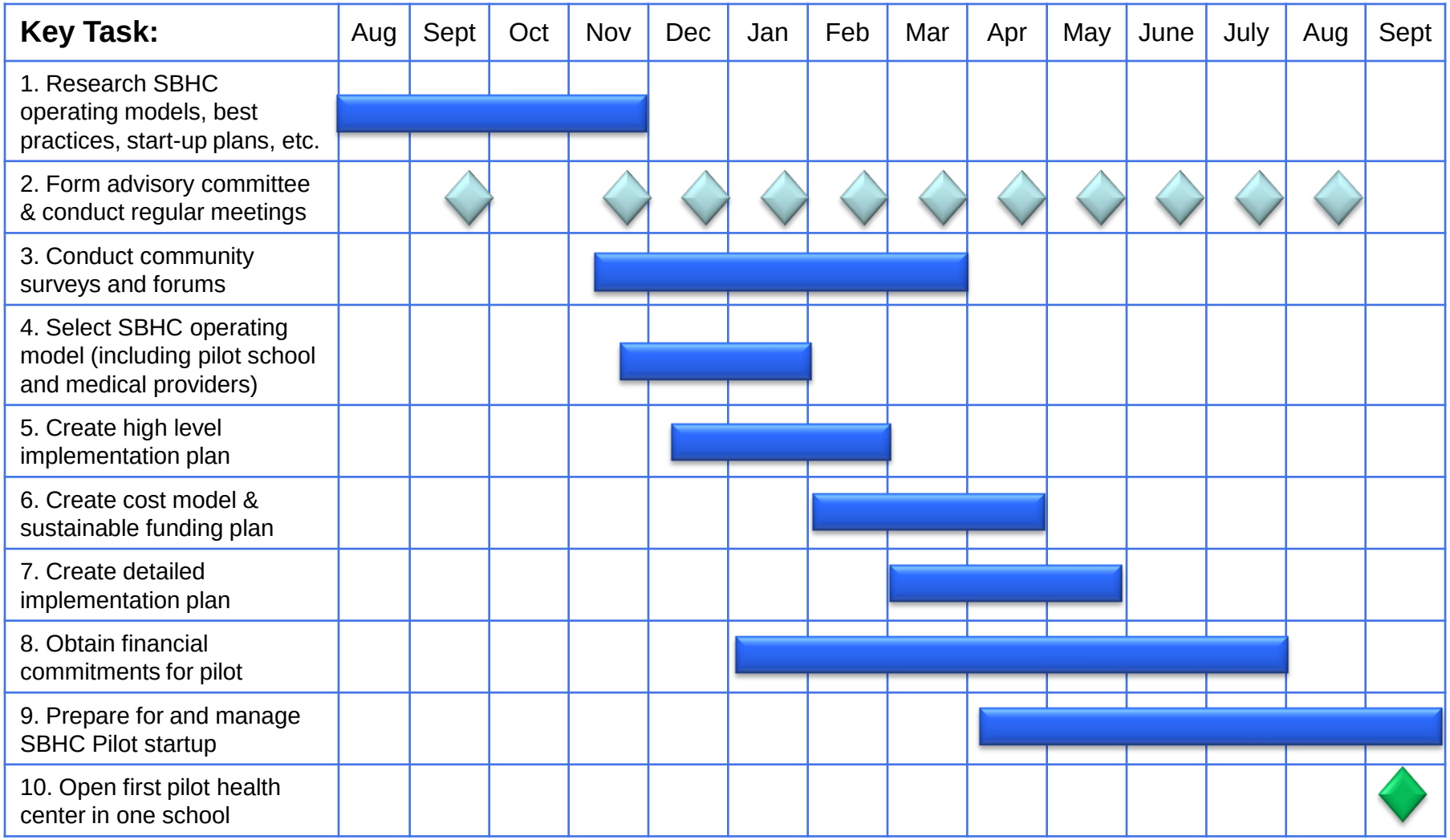
The Committee may shift into a smaller and more formal steering group

- This will be a decision for the Advisory Committee

Wherever possible, decisions will be clearly framed and then made by the Advisory Committee

- Stacy, Ben, and Mike (the planning team) will collaborate to frame decisions and make recommendations and involve key stakeholders as needed prior to Committee meetings

Project Timeline



Next Steps

Questions for all present:

- Would you like to become a member of the Advisory Committee?
  - If not, would you like to receive progress reports and contribute feedback as needed?
  - Would you like to play an even deeper role than a committee member?
- Is there someone else in your organization more appropriate for the committee?
- Is there an organization or individual missing that should be involved but is not on the list?
- Would you like to meet with the planning team to discuss before deciding?

Please make sure you check the sign-in sheet!

The next meeting for the Advisory Committee will be scheduled for November

At any time, please do not hesitate to contact Mike, Ben, or Stacy with questions or input after this session

Q&A

Thank you for your participation!

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