

State Maternal and Child Health (MCH) programs improve health and enhance the quality of life of our nation's women and children. Preventive interventions supported by state MCH programs offer major benefits by reducing health care costs and promoting wellness. As policymakers consider health reform and ways to improve public health, they should consider the power of prevention for mothers and children and how state MCH programs effectively address maternal and child health needs.



# The Power of Prevention for Mothers and Children

The Cost Effectiveness of Maternal and Child Health Interventions

### Investments in America's Women and Children Must be Revitalized

State MCH programs have been authorized by Title V of the Social Security Act to provide maternal and child health services for over 70 years. State MCH programs develop, deliver and support comprehensive public health systems and services in every state and territory for women and children, including children with special health care needs. This work is accomplished by providing health services, linking families to appropriate care, and assuring the capacity of states to address priority health issues. While authorized at \$850 million, the Title V MCH Block Grant now stands at \$662 million—almost \$60 million less than the 2002 funding level of \$730 million.

### The Maternal and Child Health Block Grant Is Effective

A hallmark of the Title V MCH Block Grant is the flexibility it provides states to identify and develop maternal and child health programs that meet both federally-mandated performance standards and state-identified needs. The Title V MCH Block Grant is also a leader in performance and accountability. In September 2008, the Title V MCH Block Grant received the highest rating possible on the White House Office of Management & Budget's Performance Assessment Rating Tool (PART), used to assess the effectiveness of all federal programs. This review found that the Title V MCH Block Grant demonstrated ambitious goals, achieved results, is well managed, and improves efficiency. The review also found that the Title V MCH Block Grant has contributed to reductions in the infant mortality rate, prevented disabling conditions, and improved the overall health of women and children.

### The Maternal and Child Health Block Grant Serves All Our Nation's Women and Children and Focuses on the Families Most in Need

State MCH programs serve all women and children in each of the 59 states and jurisdictions. The programs also focus particular attention on poor, minority, and underserved women and children who experience disparities in health status and outcomes. Another hallmark of state MCH program work includes "high-touch" programs that serve children with special health care needs who often require intensive services. Whether serving high risk pregnant women, providing early intervention services to toddlers, or helping a youth with a disability make the transition to adulthood, state MCH programs improve the health of some of the most

### **ASSOCIATION OF MATERNAL & CHILD HEALTH PROGRAMS**

vulnerable and medically fragile Americans. State MCH programs need to be evaluated on both the cost-savings of many public health interventions but also on the benefit these programs deliver by enhancing quality of life.

State MCH programs are a fundamental part of our nation's public health system. The evidence shows that state MCH programs, and the services they ensure, merit increased national investment. Through effective and efficient interventions described below, state MCH programs improve the lives of mothers, children, and families.

### Improving Birth Outcomes and Maternal Health

Evidence shows that comprehensive prenatal care is associated with reduced incidence of low birthweight and infant mortality.<sup>1,2</sup>

Prenatal care aims to improve outcomes for both pregnant women and their babies by attempting to prevent low birthweight (under 5 pounds 8 ounces) and infant mortality. The rate of low birthweight declined slightly in 2007, to 8.2 percent from 8.3 percent in 2006, but had been rising fairly steadily since the mid-1980s.<sup>3,4</sup> Stark disparities exist in the rate of low birthweight, with the rate of low birthweight among black infants nearly double the rate for white infants.<sup>5</sup> Evidence suggests that low birthweight infants may be at increased risk for coronary heart disease, stroke, hypertension, diabetes, developmental delay, and behavioral problems.<sup>6,7</sup>

Preterm birth is the leading cause of death in the first month of life in the United States.<sup>8</sup> In 2005, preterm birth cost the United States at least \$26.2 billion or \$51,600 for every preterm infant born.<sup>9</sup>

The preliminary preterm birth rate (less than 37 weeks gestation) was 12.7 percent in 2007, a decline of 1 percent from 2006, but has generally been on the rise for more than two decades.<sup>10,11</sup> Preterm birth is associated with a greater risk for several birth defects and disabilities including cerebral palsy, mental retardation, visual and hearing impairment, and learning disabilities.<sup>12</sup> The lifetime cost for children born with one of 17 common birth defects and/or cerebral palsy is \$8 billion per year.<sup>13</sup> Risk factors for having a preterm birth include lack of prenatal care, smoking, substance abuse, and low socio-economic status.<sup>14</sup> Increasing women's access to health care, including prenatal care, and access to smoking cessation services—along with support for additional research and data collection—will help to prevent preterm birth.

### How Title V Makes a Difference

State MCH programs link uninsured women to available prenatal services, coordinate closely with state Medicaid programs to improve outreach and enrollment services to eligible women and assure capacity to meet the needs of women in their state. Preconception health is a focus of many state MCH programs that work to improve women's health prior to pregnancy in order to improve pregnancy related outcomes. State MCH programs also develop regionalized systems to care for low birthweight and medically fragile newborns. Finally, state MCH programs assure data collection and performance monitoring to examine and positively impact the incidence of preterm birth, infant mortality, and factors that may contribute to maternal mortality and morbidity.



### **Breastfeeding Promotion**

Total medical costs are lower for fully breastfed infants than never-breastfed infants since breastfed infants typically need fewer sick care visits, prescriptions, and hospitalizations.<sup>15</sup> Recent studies show that babies who are not exclusively breastfed for 6 months are more likely to develop a wide range of infectious diseases including ear infections, diarrhea, and respiratory illnesses.<sup>16</sup> Infants who are breastfed also have better outcomes later in life including lower rates of obesity, asthma, and leukemia.<sup>17</sup>

### How Title V Makes a Difference

State MCH programs promote breastfeeding by developing educational materials for new mothers on breast feeding practices and providing information on breastfeeding to all residents of their states through websites, toll-free telephone information lines, and coordinating with other programs such as WIC (The Special Supplemental Nutrition Program for Women, Infants, and Children). State MCH programs also provide lactation consultants and work with policy makers, employers, hospitals and other partners to adopt breast-feeding friendly policies in the workplace.

### Home Visiting for Mothers and Infants

Home visiting programs result in fewer incidences of child injury and neglect, reduced child mortality, fewer subsequent pregnancies, and mothers' greater stability of relationships with partners.<sup>18,19</sup>

Home visitation is an effective strategy to reach out to new parents and improve the health and well being of the mother and newborn. Based on data from the large national home visitation models (e.g., Parents as Teachers, Healthy Families America, Early Head



Start, Parent Child Home Program, Home Instruction for Parents of Preschool Youngsters, and the Nurse Family Partnership) it is estimated that somewhere between 400,000 and 500,000 young children and their families receive intensive home visitation services each year.<sup>20</sup>

#### How Title V Makes a Difference

Overall, 40 states manage or finance home visiting programs and a majority of these programs are managed by state MCH programs. The federal Title V legislation encourages home visiting and many states use Title V MCH Block Grant funds to support home visiting programs. For pregnant women and mothers with new babies, these programs deliver educational visits, provide parent education, and link new mothers and families to needed health and social services.

### Smoking Cessation for Pregnant Women and Mothers

Studies suggest that every \$1 spent on smoking cessation counseling for pregnant women saves \$3 in neonatal intensive care costs.<sup>21</sup>

Simple interventions for pregnant women are effective both in increasing smoking cessation and in reducing negative birth outcomes.<sup>22</sup> In the U.S. almost 500,000 babies are born annually to mothers who smoked during pregnancy and an estimated 25-50 percent of children are exposed by household members to second hand, or environmental tobacco smoke.<sup>23,24</sup> Prenatal exposure to cigarette smoking is associated with many risks including preterm delivery, low birthweight, Sudden Infant Death Syndrome, and Attention Deficit Hyperactivity Disorder.<sup>25,26,27</sup> The financial burdens associated with smoking during pregnancy are substantial as well: annual smoking-attributable costs of neonatal care were estimated to be \$2.3 billion and the annual costs of smoking-attributable complicated births were \$1.85 billion.<sup>28</sup> In addition, the cost to treat childhood illnesses caused by parental smoking has been estimated at \$7.9 billion per year.<sup>29</sup>

#### How Title V Makes a Difference

State MCH programs fund state-wide smoking cessation or "quit lines" for pregnant women and provide education within their state on the dangers of smoking during pregnancy. Providers are also trained by state MCH programs to refer women to quit lines. State MCH programs also partner with other groups to educate and inform the public on the dangers of smoking, and promote smoking cessation at the state and local levels.

### Reducing Maternal Obesity and Chronic Disease

Every \$1 spent on preconception care programs for women with diabetes, can reduce health costs by up to \$5.19 by preventing costly complications in both mothers and babies.<sup>30</sup> Gestational diabetes is the most common medical complication of pregnancy occurring in at least 4 percent of all pregnancies in the United States, or approximately 100,000 pregnant women annually.<sup>31</sup> Many women who have had gestational diabetes become pregnant again and these children are at risk of future diabetes and obesity. Interventions not only improve women's health, but also the health of future generations.<sup>32</sup> Interventions to prevent or delay prediabetes from progressing to type 2 diabetes are feasible and cost-effective.<sup>33</sup> Research from the Diabetes Prevention Program found that lifestyle interventions are more cost-effective than pharmacological agents.<sup>34</sup> During the prevention program study period direct medical costs were \$432 lower per participant after receiving the lifestyle change intervention.<sup>35</sup>

## Investing \$10 per person per year in community-based disease prevention could save more than \$16 billion annually within five years.<sup>36</sup>

Almost half of the U.S. population has one or more chronic diseases such as heart disease, hypertension, stroke, and diabetes and these individuals make up three-fourths of health care spending.<sup>37,38</sup> With the rise of obesity rates in the U.S. obesity during pregnancy is now a common high-risk obstetrical condition affecting about one in five women who give birth.<sup>39,40</sup> Obesity increases the risk of poor pregnancy outcomes by potentially causing serious pregnancy-related medical complications such as hypertension, infertility, preeclampsia, and increased likelihood of cesarean section.<sup>41</sup>

### Physical activity interventions have been found to be costeffective and offer good value for money.

Physical inactivity is linked to an increased risk for many chronic diseases. Even modest increases in physical activity have the potential to improve health. Population-based interventions to promote health and prevent disease have provided evidence that public health efforts can successfully increase physical activity. Strategies recommended by the Task Force on Community Preventive Services include community-wide campaigns, individually adapted health behavior change, social-support interventions in community settings, and the creation of enhanced access to places for physical activity combined with informational outreach activities.<sup>42</sup> Each of these interventions meet the threshold of cost-effectiveness commonly used to determine whether interventions provide good value for money.<sup>43</sup> Cost-effectiveness ratios ranged between \$14,000 and \$69,000 per quality-adjusted life year gained.<sup>44</sup>

### How Title V Makes a Difference

State MCH and Chronic Disease programs work together at the state and community levels to educate women, children, and families about the importance of physical activity, nutrition and obesity prevention throughout the lifespan. State MCH programs also work with other agencies, such as WIC, to provide education on healthy eating during pregnancy. State MCH programs participate in task forces to address healthy weight in women, prevent chronic diseases such as gestational diabetes, publicize wellness messages for families and establish and promote comprehensive programs for worksite wellness.

### **Newborn Screening**

**Early detection of genetic and metabolic conditions can lead to reductions in death and disability as well as saved costs.** All 50 states and the District of Columbia require that every baby be screened for 21 or more of the 29 serious genetic or functional disorders recommended by the American College of Medical Genetics (ACMG) and endorsed by the March of Dimes. Most of these birth disorders have no immediate visible effects on an infant but unless detected and treated early these disorders can cause physical problems, mental retardation and in some cases death. Phenylketonuria (PKU), a rare metabolic disorder, affects approximately one of every 15,000 infants born in the United States.<sup>45</sup> Studies have found that PKU screening and treatment represent a net direct cost savings.<sup>46</sup>

### How Title V Makes a Difference

State MCH programs are responsible for assuring that newborn screening systems are in place statewide and that clinicians are alerted when follow-up is required. State MCH programs provide surveillance for early hearing screening and referrals for follow up services. State MCH programs also educate and provide resources to parents of children with special health care needs and provide support programs that help families navigate the health system. State MCH programs of care that support children with special health care needs and providers on creating systems of care that support children with special health care needs and their families. Many state MCH programs fill gaps in insurance programs that do not fully cover special needs children or rare conditions by providing care and services not otherwise available such as special foods and medical equipment.

### **Ensuring Child Immunizations**

Vaccines are one of the most cost effective tools for preventing disease. Every \$1 spent on vaccines saves up to \$27 in future medical and social costs.<sup>47</sup>

Routine childhood immunizations prevent 14 million cases of disease and 33,000 deaths every year, resulting in annual cost savings of \$9.9 billion in direct medical costs and an additional \$43.3 billion in indirect costs.<sup>48</sup> Vaccinating against pneumococcal disease alone saves an estimated \$460 million a year due to decreases in ear infections.<sup>49</sup> The vaccine cost to fully immunize children is rising, yet the federal immunization program funding has been nearly flat.<sup>50,51,52</sup>

### How Title V Makes a Difference

State MCH programs work to promote routine health screenings for all children that include assessment of immunization status, assure immunization administration, and establish systems and referral networks that link low-income children to state immunization programs. State MCH programs also link public health officials to health care providers to assure that children within their jurisdictions are vaccinated.

### Early and Periodic Screening, Diagnosis, and Treatment for All Children

Chronic conditions such as asthma, autism, sickle cell disease, cystic fibrosis and obesity account for the majority of pediatric hospitalizations and health care spending.<sup>53</sup>

As acute health conditions in children have declined the relative importance of serious and chronic health conditions, and risks for such conditions, has grown.<sup>54</sup> However, research into chronic illness in adults has shed new light on approaches to managing a child's health in order to avert long-term consequences.<sup>55</sup>



Early screening, diagnosis, and treatment address health problems early—before they become more complex and their treatment more costly.

The Early and Periodic Screening, Diagnostic and Treatment (EPSDT) service is Medicaid's comprehensive and preventive child health program for individuals under age 21 to ascertain physical and mental wellbeing and provide Medicaid covered services to correct or ameliorate health problems and chronic conditions. The intent of the program is to enable providers to screen, diagnose, and treat health problems before they become more complex and their treatment more costly.<sup>56</sup> As a result of Medicaid eligibility expansion reforms EPSDT benefits now reach more than 25 million low-income children, and states have new options to extend this special coverage to children with serious disabilities in moderate-income families.<sup>57</sup>

### How Title V Makes a Difference

Under federal law, Medicaid and state MCH programs share responsibility for the quality of EPSDT services. Partnerships between state Medicaid and state MCH programs are encouraged to assure better access to and receipt of the full range of EPSDT services. This partnership has been shown to improve access and administrative efficiency.<sup>58</sup> State MCH program and Medicaid staff collaborate to develop and select screening tools for use in EPSDT screenings, and in many states MCH programs provide training for providers to promote EPSDT screenings.



### Early Childhood Programs

Early detection of physical and intellectual disabilities results in more efficient and effective treatment and support for children with special health care needs.

Documentation of estimated lifetime costs for other physical and intellectual disabilities include: \$51.2 billion for persons with mental retardation, \$11.5 billion for persons with cerebral palsy, \$2.1 billion for persons with hearing loss, and \$2.5 billion for persons with vision impairment.<sup>59</sup> These estimates underscore the need for early screening and treatment to reduce the costs associated with developmental disabilities and increase successful treatment and support.<sup>60</sup> Getting children screened results in a more efficient delivery of treatment through early access to services.

# High-quality programs for children at risk produce strong economic returns ranging from about \$4 per dollar invested to over \$10 per dollar invested.<sup>61</sup>

The benefit returned to society comes in the form of reduced rates of crime, grade retention and special education placements, as well as increased rates of high school graduation and higher earnings as adults.<sup>62</sup>

### How Title V Makes a Difference

State MCH programs administer the state and territorial Early Childhood Comprehensive Systems Initiative (ECCS) to support state and community efforts to strengthen, improve, and integrate early childhood service systems. These systems address the critical components of access to comprehensive health services and medical homes including social-emotional development and mental health of young children; early care and education; and parenting education and family support.<sup>63</sup> State MCH programs also provide training to providers on the importance of screening children early for developmental delays and link children and families to treatment and support services available in their state.

### Ensuring Every Child Has Access to a Medical Home

The medical home's potential to shift the health system from its current reactive approach to one of prevention and care coordination will pay large dividends, particularly for at-risk populations.<sup>64</sup>

The American Academy of Pediatrics describes the medical home as a model of delivering primary care that is accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective.<sup>65</sup> The North Carolina Medicaid program enrolls recipients in a network of physiciandirected medical homes. A Mercer analysis showed that an upfront \$10.2 million investment for North Carolina Community Care operations saved \$244 million in overall healthcare costs for the state. Similar results were found in 2005 and 2006.<sup>66</sup>

## Care coordination—a critical component of a medical home—has been shown to prevent emergency department visits and unnecessary use of services.<sup>67</sup>

Care coordination is a process that links children and youth and their families with appropriate services and resources in order to achieve good health. Care coordination has the potential to help families avoid missed days of work and school.<sup>68</sup> It also reduces duplication of services and promotes efficient use of health services.

A medical home can reduce or even eliminate racial and ethnic disparities in access and quality for insured persons.<sup>69</sup> When patients have a medical home, their access to needed care, receipt of routine preventive screenings, and management of chronic conditions improve substantially.<sup>70</sup>

### How Title V Makes a Difference

State MCH programs actively promote medical home education and implementation in their states and territories and provide technical assistance to clinicians on how to effectively administer medical home programs in their practices. Many state MCH programs place parent-professional care coordinators in physician practices to help other parents navigate the complex health care system and assure that children receive familycentered, culturally appropriate care within a medical home.

### **Preventing Childhood Injury**

The injuries incurred by children and adolescents in one year create total lifetime economic costs estimated at more than \$50 billion in medical expenses and lost productivity.<sup>71</sup> Injuries are the leading cause of death and disability for children and adolescents—approximately 6,000 children die from injuries every year, and more than 90,000 are permanently disabled.<sup>72</sup> The United States spends billions annually to provide health insurance to children—in part to treat injuries—yet the entire 2008 budget of the CDC's National Center for Injury Prevention and Control is \$134 million.<sup>73</sup> At this funding level, the CDC is able to fund only 30 states for basic injury prevention programs.

### Childhood injury prevention programs work.

Injuries to children have decreased 45 percent over the past 20 years. The CDC estimates that 240,000 lives were saved between 1966 and 1990 because of improved motor vehicle and highway design; increased use of safety belts, child safety seats, and motorcycle helmets; and enforcement of laws regarding drinking and driving and speeding.<sup>74</sup>

### How Title V Makes a Difference

State MCH programs directly support several surveillance efforts including infant mortality reviews and child death review programs. State MCH programs invest in injury prevention programs, including state and local initiatives to promote the proper use of child safety seats and helmets, and reduce recreational injuries such as falls in playgrounds. State MCH programs also promote safe sleeping practices including Sudden Infant Death Syndrome (SIDS) education programs like the "Back to Sleep" campaign and others to prevent infant mortality. Intentional injury, child abuse, and neglect, and shaken baby syndrome are also addressed in education campaigns to encourage proper child supervision. State MCH programs also support poison prevention and control programs including family education and poison control centers.



### **Promoting Oral Health**

Low-income children who have their first preventive dental visit by age one are less likely to have subsequent restorative or emergency room visits, and their average dental-related costs are almost 40 percent lower over a five year period than children who receive their first preventive visit after age one.<sup>75</sup> Oral health promotion and prevention is critical to reducing disease burden and increasing quality of life. Failure to provide access to preventive dental care almost always results in quick fixes that are short-lived and high-priced, especially among low income children and their families who are without the resources necessary to access dental services.<sup>76,77</sup> Estimates reveal a savings of 7.3 percent from regular screening and early intervention with identified oral disease.<sup>78</sup>

### How Title V Makes a Difference

State MCH programs have prioritized oral health in recent years but funding cuts have reduced their ability to make increased investments. Many state MCH programs provide support to and coordinate with state dental directors who oversee state programs to improve the oral health of individuals within their jurisdictions. This work includes assuring access to dental services for underserved populations, supporting dental sealant programs, coordinating with community health centers and others to provide oral health services, and providing education about the importance of maintaining good oral hygiene before, during, and after pregnancy. State MCH programs may also purchase direct care services when there are no other resources available to assure children receive oral health services.

### **Promoting Adolescent Health**

### The total cost of adolescent health risk behaviors is estimated to be \$435.4 billion per year.

Adolescents with multiple risk behaviors account for the largest bulk of these costs—with those engaged in multiple risk behaviors costing as much as \$350 billion.<sup>79</sup> Risky behaviors that have impacts on the health and well being of adolescents include smoking, binge drinking, substance abuse, suicide attempts, and high risk sexual behavior. Among adolescents there are stark racial and ethnic disparities in the rate of particular health risk behaviors such as obesity and early initiation of sexual activity.<sup>80</sup>

### Young people who smoke are more likely to use tobacco as adults.

Given that 23 percent of U.S. high school students and 8 percent of middle school students are current cigarette smokers, the longterm costs of youth tobacco use are significant. Cigarette smoking (1997-2001) was estimated to be responsible for \$167 billion in annual health-related economic losses in the U.S. (\$75 billion in direct medical costs, and \$92 billion in lost productivity).<sup>81,82,83,84,85</sup>

### Among young adults, 31 percent are uninsured, which is higher than any other age group.<sup>86</sup>

The availability and access to quality health care affects all young people, but especially those at high risk for medical conditions, with special health care needs, or of low socioeconomic status.<sup>87</sup>

### How Title V Makes a Difference

State MCH Programs help young people avoid health risks and gain the skills needed to become healthy and successful adults. State MCH programs and their partners address access to health care, violence, mental health and substance use, reproductive health, and prevention of chronic disease during adulthood. State MCH programs often support state adolescent health coordinators who work to improve the health of adolescents within their states and territories. Adolescent health programs promote positive youth development, empower youth to make healthy choices, and link health programs to schools, communities, youth groups and faith-based organizations. Promoting healthy behaviors among the adolescent population capitalizes on early childhood investments that help increase positive outcomes such as school completion and adult health. Prevention and health promotion among adolescents also ensures healthy transitions to adulthood and leads to healthier families.

### Teen Pregnancy Prevention and Family Planning Services

Adolescent childbearing cost U.S. taxpayers about \$9 billion per year including direct costs associated with health care, foster care, criminal justice, and public assistance, as well as lost tax revenues.<sup>88</sup>

The birth rate for U.S. teenagers increased in 2006 and 2007,



interrupting the decline in teen pregnancy from 1991 to 2005.<sup>89</sup> The U.S. still has the highest teen pregnancy and teen birth rates in the industrialized world.<sup>90</sup> The average annual cost of not using contraception was estimated at \$1,267 per adolescent at risk of unintended pregnancy.<sup>91</sup>

### Public expenditures for family planning not only help women to achieve their childbearing goals, but they also save public dollars: for every \$1 spent, \$4 is saved.<sup>92</sup>

Publicly funded family planning typically involves much more than just contraceptive services. Care includes giving low-income women access to such preventative services as screening for cervical and breast cancers and sexually transmitted infections and referrals to a variety of health and social services that they might otherwise forgo.<sup>93</sup> Without publicly funded family planning services, the number of unintended pregnancies and abortions occurring in the United States would be nearly two-thirds higher among teens and among women overall.<sup>94</sup>

#### How Title V Makes a Difference

Many State MCH programs support family planning efforts as well as provide grants to community-based and youth-serving organizations to administer teen pregnancy prevention and other comprehensive health and reproductive health education programs. State MCH programs also work with partners, such as Title X Family Planning programs, to support educational efforts ranging from teen pregnancy prevention summits and conferences, to parent workshops, and media and social marketing campaigns. State MCH programs also provide funding for school-based and school-linked health centers to provide health education and contraceptive services, HIV and sexually transmitted infection (STI) tests, Pap smears, and pregnancy tests. Health centers also counsel pregnant and parenting teens to prevent a second teen pregnancy. State MCH programs often work with state Medicaid agencies to obtain Medicaid family planning waivers that allow states to expand services to more women, particularly during the postpartum period when many women lose Medicaid coverage.

### Sexually Transmitted Infection (STI) Screening and Treatment

**Some forms of HPV can result in cervical cancer, which is preventable and generally curable if detected early.**<sup>95</sup> Approximately 20 million people are currently infected with genital human papilloma virus (HPV) in the United States.<sup>96</sup> As many as half of these infections are among adolescents and young adults, ages 15 through 24.<sup>97</sup> HPV vaccines and especially cervical cancer screenings are very effective preventative measures. <sup>98,99,100,101</sup> Although the exact financial burden of HPV is unknown it is estimated that the annual direct medical costs associated with cervical cancer treatment in the US range between \$300 million and \$400 million.<sup>102</sup> The costs of diagnosis, treatment, and follow-up associated with early stages of cervical cancer are \$4,359, whereas the same costs for late, invasive cervical cancer are more than triple that amount.<sup>103</sup>

Chlamydia screening is ranked among the most beneficial preventive health services having the potential to provide substantial benefits if only utilization rates improved.<sup>104</sup> Chlamydia is the most common bacterial sexually transmitted disease in the U.S., with three million new cases of chlamydia occurring annually.<sup>105</sup> Although chlamydia is common among all races and ethnic groups, African-American women are disproportionately affected. In 2006, the rate of reported chlamydia cases per 100,000 black females (1,760.9) was more than seven times that of white females (237.0).<sup>106</sup> The health consequences of chlamydia for women include increased risk of infertility, chronic pelvic pain, and ectopic pregnancy.<sup>107</sup> There are also negative affects for infants born to women with chlamydia including conjunctivitis (eye infection) and pneumonia.<sup>108</sup> Based on 2000 estimates of disease burden, chlamydia was the fourth most costly STD (including HIV) with total annual costs of \$624 million in 2007 U.S. dollars.109

### How Title V Makes a Difference

State MCH programs support teen pregnancy and HIV/STI prevention efforts through the provision of comprehensive services that range from abstinence education to the provision of contraceptives and prenatal care. In addition, state MCH programs provide HPV vaccine education and the HPV vaccine to young girls and women either for free or low cost. MCH programs also administer secondary prevention measures such as free chlamydia screening and treatment to adolescents and women and also monitor STI rates throughout the state.

### **The Power of Prevention**

State MCH programs and the services and systems they support are worthy of increased national investment and should be strengthened to improve our nation's health care and public health system. These examples demonstrate the costeffectiveness of program activities, and the results they produce by enhancing quality of life for women, children, and families within states and territories. AMCHP calls on policymakers to consider the power of prevention for mothers and children and how Title V MCH programs effectively address state maternal and child health needs.

### **Endnotes**

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# The Power of Prevention for Mothers and Children

The Cost Effectiveness of Maternal and Child Health Interventions



### About this Publication

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### **About AMCHP**

The Association of Maternal and Child Health Programs is a national resource, partner and advocate for state public health leaders and others working to improve the health of women, children, youth and families, including those with special health care needs. AMCHP supports state maternal and child health programs and provides national leadership on issues affecting women and children. Our members come from the highest levels of state government and include directors of maternal and child health programs, directors of programs for children with special health care needs, and other public health leaders. AMCHP members serve more than 35 million people and strive to improve the health of all women, infants, children and adolescents, including those with special health care needs by administering critical public health education and screening services, and coordinating preventive, primary and specialty care. Our membership also includes academic, advocacy and community based family health professionals, as well as families themselves.



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