

Bright Start Home Visiting in South Dakota

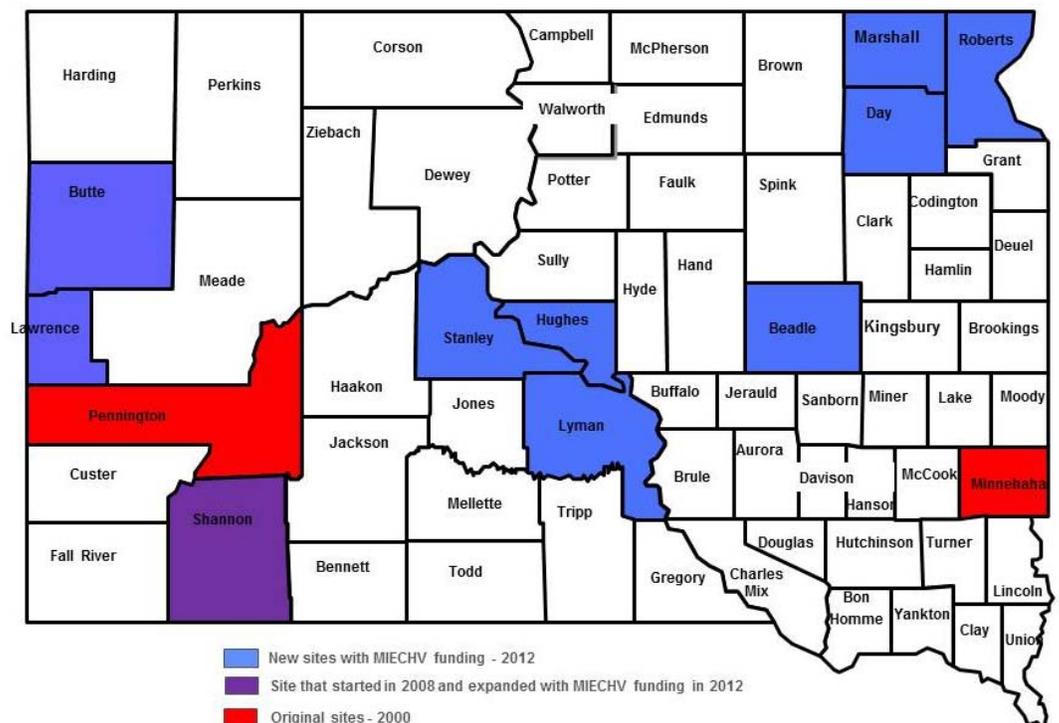
Since 2000, the South Dakota Department of Health has operated the Bright Start Home Visiting program. Registered nurses meet with at-risk, low-income families during their pregnancies and continue until their child turns two or three years old. The nurse home visitors provide prenatal, maternal, infant and toddler health assessments; health and safety education; parent support; developmental screening; assistance in setting and reaching life goals; and links with community resources. The program is currently available in eight service areas across the state: Rapid City, Spearfish/Belle Fourche, Pine Ridge, Kyle, Pierre/Lower Brule, Huron, Sisseton and Sioux Falls. The Sioux Falls Bright Start program is operated by the Children’s Home Society through a contract with the DOH. Bright Start is voluntary and offered at no cost to the client.

South Dakota’s Bright Start program uses the Nurse Family Partnership (NFP) model, an evidence-based community health program that partners a pregnant woman with a registered nurse early in her pregnancy and continues home visits until that child turns two years old. The NFP currently serves over 31,000 low-income, first-time moms in 43 states, the U.S. Virgin Islands and six Tribal communities.

The goals of the Nurse Family Partnership model are to:

- 1) Improve pregnancy outcomes by helping women engage in good preventative health practices, including prenatal care from their healthcare providers, improving their diets and reducing their use of cigarettes, alcohol and illegal substances;

South Dakota Bright Start Home Visiting Coverage Areas



- 2) Improve child health and development by helping parents provide responsible and competent care; and
- 3) Improve the economic self-sufficiency of the family by helping parents develop a vision for their own future, plan subsequent pregnancies, continue their education, and find employment.

In addition to this NFP model, South Dakota Bright has an expanded home visitation component that serves post-partum women, multiparous women, and children until their third birthday. This expanded program is available in Rapid City, Sioux Falls and Pine Ridge.

Both components of Bright Start focus on serving families with limited economic, social or health resources. Additionally, priority admission is given to families with parents younger than 21, a history of Child Protection Services involvement, substance use, lower education levels, or family members in the military.

The family members and support people of the client are encouraged to participate, and information for fathers and grandparents is incorporated into the curriculum. Home visitors work with the client to build on existing personal and family strengths in a solution-focused manner. Because a family may be involved in the program for two to three years, small changes over time that will build toward meeting larger life goals are encouraged. Nurses see families in their homes for weekly, bi-weekly, or monthly visits dependent on their needs and which phase of the program they are in.

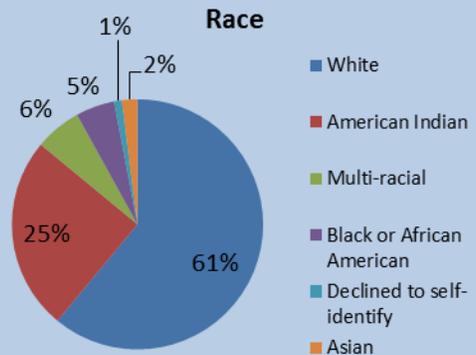
SD Bright Start Client Demographics

At intake:

Median age: 19

87% Unmarried

81% Medicaid recipients



Ethnicity

91% Non-Hispanic/Latina

9% Hispanic/Latina

Data Oct. 1, 2010 - June 30, 2014.

All data is client self-identified.

Source: Nurse-Family Partnership in South Dakota, State Profile 2014

The History of Bright Start Home Visiting in South Dakota

The Bright Start initiative started in 2000 and involved several strategies to address the needs of young families in the state. Home visiting was one of those strategies, and has been housed in the Department of Health, Office of Family and Community Health since that time. Sioux Falls and Rapid City were the original sites, and funding for the program comes from state Medicaid and TANF dollars. The Children's Home Society took over the administration of the Sioux Falls site in 2007 through a contract with the Department of Health. In 2008, Pine Ridge was added as an extension of the Rapid City team, with one home visitor located at that site. The sites funded by Medicaid and TANF have the capacity to serve 175 families.

With the establishment of the Affordable Care Act (ACA) in 2010, federal funding was expanded for home visiting programs through the Maternal, Infant and Early Childhood Home Visiting (MIECHV) grant program. Based on a statewide needs assessment, potential new service areas were identified that had high infant mortality rates. South Dakota received \$1 million in MIECHV funding to expand home visiting services to Lawrence, Butte, Lyman, Stanley, Hughes, Beadle, Marshall, Roberts and Day counties, and to add additional home visitors to the Pine Ridge reservation. These sites implement the Nurse Family Partnership program exclusively. The sites funded by the MIECHV grant have the capacity to serve 129 families.

"My nurse makes sure we get the information that fits what I want to learn."

"I like being on Bright Start because they try and help me be better than I thought I could be."

"I've learned so much on Bright Start. It helps me sort through the advice I get from friends and family to help decide what I want to do."

Bright Start client comments

Positive Outcomes for Clients Served by South Dakota Bright Start Home Visiting

With the addition of federal funding came a greater emphasis on data collection and outcomes. Both the evidence based home-visiting model, NFP, and the MIECHV grant monitor outcomes around screening rates for maternal depression, child development, and domestic violence. The home visitors also track changes in use of health care services, breastfeeding, client substance use, employment/education status, subsequent pregnancies and use of community resources.

The Maternal, Infant, and Early Childhood Home Visiting Program is administered by the Health Resources and Services Administration (HRSA) in close partnership with the Administration for Children and Families (ACF). Both NFP and HRSA have recently released reports on Home Visiting service delivery in South Dakota:

- *Nurse-Family Partnership in South Dakota, State Profile 2014*—Data for all NFP clients served in South Dakota since 2000. http://www.nursefamilypartnership.org/assets/PDF/Communities/State-profiles/SD_State_Profile.aspx
- *The Maternal, Infant, and Early Childhood Home Visiting Program, Partnering with Parents to Help Children Succeed*—Health Resources & Services Administration FY 2014 national benchmark outcomes. <http://mchb.hrsa.gov/programs/homevisiting/programbrief.pdf>
- *Health Resources & Services Administration State Fact Sheet—South Dakota Home Visiting Program, 2014*—Data for the recently completed federal fiscal year, October 1, 2013 through September 30, 2014. <http://mchb.hrsa.gov/programs/homevisiting/states/sd.pdf>

Additionally, the positive outcomes related to evidence based home visiting programs have reportedly resulted in reduced costs associated with child abuse and neglect, crime, and educational interventions. In 2014,

Positive Outcomes for Clients Served by South Dakota's Nurse-Family Partnership

42% of mothers who entered the program without a diploma/GED have since earned one, and another 27% are working toward obtaining one

86% of mothers initiated breastfeeding

93% of children received all recommended immunizations by 24 months

91% of babies born were born full term and 93% were born at a healthy weight at or above 2500 g (5.5 lbs.)

Source: Nurse-Family Partnership in South Dakota, State Profile 2014

Client Demographics and Outcome Data from the MIECHV Funded Caseloads in SD

In Federal Fiscal Year 2014:

72% of clients have household incomes at or below 100% of the federal poverty level

28% of clients were students

61% of clients were unemployed

13% of clients had NO insurance coverage, 29% had Medicaid or SCHIP, and 50% consider IHS to be their insurance coverage

77% of clients were unmarried

32% of newly enrolled clients were users of tobacco in the home, but by 36 weeks gestation there was a 50% decrease in maternal smoking

97% of clients with an identified need at intake received a referral from the nurse home visitor to an appropriate community resource

Source: HRSA State Fact Sheet—South Dakota Home Visiting Program, 2014

the Washington State Institute for Public Policy estimated that NFP produced an average of \$17,332 in net savings for each family served, or \$2.77 for each dollar spent. A Rand 2005 report estimated \$5.70 returned on each dollar spent for NFP services for higher-risk parents.

In addition to the NFP Model and HRSA required benchmarks, other areas of program impact and improvement are under study. Currently, the program is implementing a Continuous Quality Improvement (CQI) project at both the statewide and local program levels to examine client retention in the program. Maximum program impact is achieved when families stay enrolled in the program and receive the full dose of home visiting services. Each local team is implementing strategies to test for impact on client retention using PDSA cycles of study.

In April 2015, Congress voted to extend funding for the MIECHV program through federal fiscal year 2017. As South Dakota Bright Start continues to track the changes over time of families involved in home visiting services, more data will be available to tell the story of impacts made on vulnerable families in the state.

For more information contact Family and Community Health Administrator Darlene Bergeleen at 605-773-3361 or Home Visiting Program Manager Carrie Churchill at 605-394-2516.

Resources

- www.nursefamilypartnership.org
- www.nursefamilypartnership.org/proven-results/published-research
- mchb.hrsa.gov/programs/homevisiting/index.html
- forbabysakesd.org/

CDC Honors Parkston Nurse With Childhood Immunization Champion Award

The federal Centers for Disease Control and Prevention (CDC) has honored Kerri Lutjens, RN as a 2015 Childhood Immunization Champion. CDC presents the annual awards to recognize individuals making outstanding efforts to ensure that children in their communities are fully immunized against 14 preventable diseases before the age of two. The awards are announced in conjunction with National Infant Immunization Week, April 18-25.

Lutjens is a nurse at Avera St. Benedict's in Parkston who works as the visiting nurse for seven Hutterite colonies in the area. She visits the colonies biweekly to deliver a variety of health care services, including immunizations.

Prior to her visits 87 percent of children in the seven colonies had either never been vaccinated or were not up to date on their vaccinations. Since implementing the visiting nurse program, Lutjens has administered more than 600 childhood vaccinations. The high immunization level she's worked to achieve helped prevent an outbreak of whooping cough when a case was diagnosed in one of the colonies.

Read Lutjens' profile and learn more about the *Childhood Immunization Champion Award* program at <http://www.cdc.gov/vaccines/champions>.



"The information I get from Bright Start is just right for her age – potty training, temper tantrums, how she learns. The nurse is very understanding and helpful."

"My nurse really listens and is open to any conversation."

"I like that someone who knows what she's talking about is there to answer questions"

Bright Start client comments

Electronic access to South Dakota Public Health Bulletin

If you would prefer to receive the South Dakota Public Health Bulletin electronically, please send an email request to DOH.INFO@state.sd.us. Include your name and address so you can be removed from the mailing list for the print edition.

Back issues of the Bulletin are archived at <http://doh.sd.gov/resources/bulletin.aspx>.

National plan to combat antibiotic-resistant bacteria released; South Dakota Antimicrobial Stewardship Workgroup in place

Antibiotics and similar drugs, together called antimicrobial agents, have been used for the last 70 years to treat patients who have infectious diseases; these drugs *have greatly reduced illness and death from infectious diseases*. However, these drugs have been used so widely and for so long that the infectious organisms the antibiotics are designed to kill have adapted to them, making the drugs less effective.

Each year in the United States, at least 2 million people become infected with bacteria that are resistant to antibiotics and at least 23,000 people die each year as a direct result of these infections. In March of 2015, the White House released the National Action Plan for Combating Antibiotic-Resistant Bacteria. Over the next several years this plan will work toward the goals of slowing the emergence of resistant bacteria and preventing the spread of resistant infections.

Over the next several years, the plan calls upon health care facilities to:

- establish antibiotic stewardship programs in all acute care hospitals and improved antibiotic stewardship across all healthcare settings;
- reduce inappropriate antibiotic use by 50% in outpatient settings and 20% in inpatient settings;
- establish a state Antimicrobial Stewardship Prevention Program in all 50 states to monitor regionally important multidrug resistant organisms and provide feedback and technical assistance to healthcare facilities.

South Dakota has been actively engaged in antimicrobial stewardship since the Department of Health came together with health care partners across the state to form an antimicrobial stewardship workgroup in 2013. The workgroup membership includes Avera Health, Regional Health, Sanford Health, hospitals, long term care facilities, clinics, the South Dakota Infection Control Council, the South Dakota Pharmacy Association, the South Dakota Association of Healthcare Organizations, the USD Sanford School of Medicine, the Indian Health Service and the department.

The group and its members work closely to establish programs in health care settings improving antibiotic stewardship across the spectrum of care. Workgroup members have implemented numerous stewardship activities:

- created pediatric upper respiratory guidelines to address overprescribing of antibiotics in outpatient settings;
- monitored multidrug resistant organisms regionally and created workgroups to provide feedback and technical assistance, resulting in reductions of carbapenem-resistant *Enterobacteriaceae* of >46%;
- worked with hospitals and clinics to reduce utilization of broad spectrum antibiotics;
- created a regional collaborative that has succeeded in improving sensitivities for antibiotics used in treating *E. coli* from 76% to 85% of organisms in just 9 months;
- worked with academia to promote best practices and incorporate stewardship into health care curriculum in the state;
- created and disseminated an antibiogram showing where certain organisms are more resistant; and
- continued to work collaboratively across the spectrum of health care to advance stewardship in all health care settings.

South Dakota's efforts have been featured in a CDC Vital Signs special report and town hall on the subject and also on the antimicrobial stewardship website of the Association of State and Territorial Health Officials.

Specifically, the goals in the national plan call for the United States to achieve the following measures by 2020:

For CDC recognized urgent threats:

- Reduce by 50% the incidence of overall *Clostridium difficile* infection compared to estimates from 2011.
- Reduce by 60% carbapenem-resistant *Enterobacteriaceae* infections acquired during hospitalization compared to estimates.
- Maintain the prevalence of ceftriaxone-resistant *Neisseria gonorrhoeae* below 2% compared to estimates from 2013.

For CDC recognized serious threats:

- Reduce by 35% multidrug-resistant *Pseudomonas spp.* infections acquired during hospitalization compared to estimates from 2011.
- Reduce by at least 50% overall methicillin-resistant *Staphylococcus aureus* (MRSA) bloodstream infections by 2020 as compared to 2011.*
- Reduce by 25% multidrug-resistant non-typhoidal *Salmonella* infections compared to estimates from 2010-2012.
- Reduce by 15% the number of multidrug-resistant TB infections.1
- Reduce by at least 25% the rate of antibiotic-resistant invasive pneumococcal disease among <5 year-olds compared to estimates from 2008.
- Reduce by at least 25% the rate of antibiotic-resistant invasive pneumococcal disease among >65 year-olds compared to estimates from 2008.

For more information, contact Angela Jackley, Healthcare Associated Infections Coordinator, at 605-773-5348 or angela.jackley@state.sd.us

Resources

- National Action Plan for Combatting Antibiotic-Resistant Bacteria – www.whitehouse.gov/sites/default/files/docs/national_action_plan_for_combating_antibiotic-resistant_bacteria.pdf
- Association of State and Territorial Health Officials antimicrobial stewardship website – www.astho.org/Infectious-Disease/Antimicrobial-Resistance/Polices-to-Promote-Antimicrobial-Stewardship-Programs/State-Examples/
- CDC featured success story, South Dakota – www.cdc.gov/hai/state-based/pdfs/success_story-SDakota_stewardship.pdf
- South Dakota presents during CDC Town Hall – www.cdc.gov/stltpublichealth/townhall/2014/03/vitalsigns.html
- Be a smart patient – www.cdc.gov/getsmart/community/index.html
- South Dakota Healthcare Associated Infections website – doh.sd.gov/diseases/hai/

Department’s Tarkhashvili honored by CDC Director Frieden

Nato Tarkhashvili was honored by CDC Director Dr. Thomas Frieden at a special awards ceremony and reception in Atlanta in April.

Nato is a CDC Career Epidemiology Field Officer with the Office of Disease Prevention in Pierre. She received two awards from CDC’s Division of State and Local Readiness—a 2014 PPHR Honor Award for Excellence in Surveillance and Health Monitoring, Domestic, and a 2014 PPHR Honor Award for Outstanding Scientific Publications in the subcategory of behavioral and social science.



South Dakota Department of Health – Infectious Disease Surveillance

Selected Morbidity Report, 1 January – 30 April 2015

(provisional numbers) see <http://doh.sd.gov/statistics/disease-surveillance/>

	Disease	2015 year-to-date	5-year median	Percent change
Vaccine-Preventable Diseases	Diphtheria	0	0	n/a
	Tetanus	1	0	n/a
	Pertussis	4	9	-56%
	Poliomyelitis	0	0	n/a
	Measles	2	0	n/a
	Mumps	0	0	n/a
	Rubella	0	0	n/a
	<i>Haemophilus influenzae</i> type b	0	0	n/a
Sexually Transmitted Infections and Blood-borne Diseases	HIV infection	4	12	-67%
	Hepatitis B, acute	0	0	0%
	Chlamydia	1317	1317	0%
	Gonorrhea	329	204	+61%
	Syphilis, early	17	1	+>1600%
Tuberculosis	Tuberculosis	8	4	+100%
Invasive Bacterial Diseases	Meningococcal, invasive	0	1	-100%
	Invasive Group A <i>Streptococcus</i>	0	0	n/a
Enteric Diseases	<i>E. coli</i> , Shiga toxin-producing	10	6	+67%
	Campylobacteriosis	51	56	-9%
	Salmonellosis	56	41	+37%
	Shigellosis	33	2	+1550%
	Giardiasis	25	31	-19%
	Cryptosporidiosis	30	31	-3%
	Hepatitis A	0	0	0%
Vector-borne Diseases	Animal Rabies	10	9	+11%
	Tularemia	0	0	0%
	Rocky Mountain Spotted Fever	0	0	0%
	Malaria (imported)	0	0	0%
	Hantavirus Pulmonary Syndrome	0	0	0%
	Lyme disease	0	0	0%
	West Nile Virus disease	0	0	0%
Other Diseases	Legionellosis	1	2	-50%
	<i>Streptococcus pneumoniae</i> , invasive	51	40	+28%
	Additionally, the following were reported: Chicken Pox (11); CRE (6); Hep B, chronic (5); Hep C (175); MRSA, invasive (52); Q Fever (1)			

Communicable diseases are obligatorily reportable by physicians, hospitals, laboratories, and institutions. The **Reportable Diseases List** is found at <http://doh.sd.gov/diseases/infectious/reporting-communicable-diseases.aspx> or upon request. Diseases are reportable by telephone, fax, mail, website, or courier.

Secure website: www.state.sd.us/doh/diseasereport

Telephones: 24 hour answering device 1-800-592-1804; for a live person at any time call 1-800-592-1861; after hours emergency 605-280-4810.

Fax 605-773-5509.

Mail in a sealed envelope addressed to the DOH, Office of Disease Prevention, 615 E. 4th Street, Pierre, SD 57501, marked "Confidential Medical Report".