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South Dakota's "County Nurse" Program Turns 100

This year marks the 100-year-anniversary of South Dakota's county nurse program, the precursor to today's community health nurses in the Department of Health's Child and Family Services offices and Public Health Alliance sites across the state. Approximately 100 nurses deliver services in 63 of the state's 66 counties. Find more details about county health nurses as well as other department history at <http://doh.sd.gov/news/>

100 years ago

- The 1917 South Dakota Legislature passed the "County Nurse" bill strongly influenced by Mrs. E.P. Wanzer, who is considered the "Mother of Public Health Nursing" in South Dakota.
- The first public health nurse in South Dakota was Mary G. Fraser, RN.

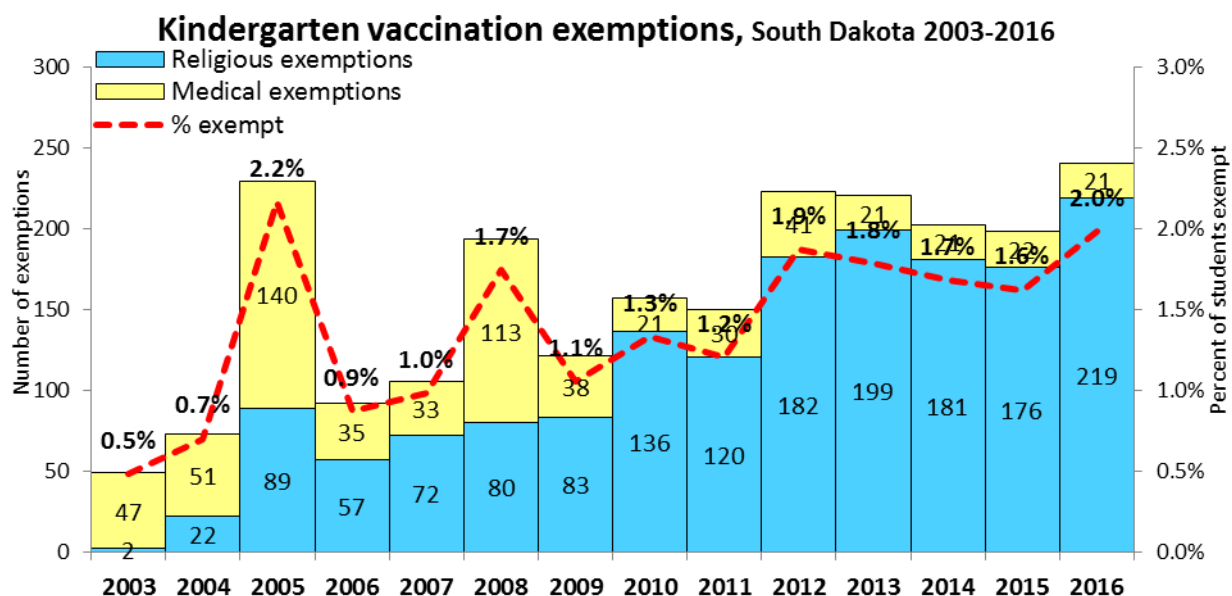


Source: South Dakota Celebrating 125 years of Health Pioneers and Milestones of the Department of Health 1889-2014.

Kindergarten Vaccination 2016-2017 School Year — Healthy Kids, Healthy Families, Healthy Schools, Healthy Communities, Healthy South Dakota

Places where children gather, like schools and child day cares, are ideal places for disease transmission. Diseases such as measles, whooping cough, chicken pox, mumps, polio, rubella, hepatitis A and diphtheria were once common childhood scourges in South Dakota. Today vaccines prevent these diseases and protect the public's health.

For the 2016-2017 kindergarten class 381 South Dakota schools submitted vaccination audit data. Four percent of schools had <80% MMR (measles, mumps, rubella) coverage. Although this is down from 6% last year, this number is problematic considering the recent Minnesota measles outbreak. South Dakota's overall coverage rate for MMR vaccine was 96.7%, the DTaP (diphtheria, tetanus, pertussis) coverage rate was 96.4%, and the varicella (chicken pox) coverage rate was 95.4% all excellent rates, all exceeding the 95% goal, and all above the national rates. CDC. Vaccination Coverage Among Children in Kindergarten – United States, 2015-16 school year. MMWR 65, 1067-1064.



County	School Name	Students	4-DTaP	4-Polio	2-MMR	2-VAR	3-HBV	2-HAV	Exempt
Total for South Dakota Kindergarten		12,081	96.4%	96.5%	96.7%	95.4%	94.5%	75.2%	2.0%
Aurora	Corsica-Stickney Elementary	22	100.0%	100.0%	100.0%	100.0%	95.5%	90.9%	0.0%
Aurora	Plankinton Elementary	14	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Aurora	White Lake Elementary	11	100.0%	100.0%	100.0%	90.9%	100.0%	90.9%	0.0%
Aurora County	Total County	47	100.0%	100.0%	100.0%	97.9%	97.9%	93.6%	0.0%
Beadle	Buchanan K-1 Center	242	93.8%	93.8%	93.8%	93.0%	96.7%	90.5%	0.0%
Beadle	Hitchcock-Tulare Elementary	22	90.9%	95.5%	95.5%	95.5%	100.0%	68.2%	0.0%
Beadle	Huron Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Beadle	Juvenile Detention Center-88	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Beadle	Riverside Colony Elementary	<10	66.7%	100.0%	100.0%	66.7%	100.0%	33.3%	0.0%

County	School Name	Students	4-DTaP	4-Polio	2-MMR	2-VAR	3-HBV	2-HAV	Exempt
Total for South Dakota Kindergarten		12,081	96.4%	96.5%	96.7%	95.4%	94.5%	75.2%	2.0%
Beadle	Wolsey-Wessington Elem	33	93.9%	90.9%	93.9%	93.9%	97.0%	87.9%	0.0%
Beadle	Holy Trinity Catholic Elem	15	100.0%	100.0%	100.0%	93.3%	100.0%	93.3%	0.0%
Beadle	James Valley Christian Elem	22	77.3%	72.7%	81.8%	77.3%	90.9%	86.4%	4.5%
Beadle County	Total County	339	92.6%	92.6%	93.5%	92.0%	96.8%	88.2%	0.3%
Bennett County	Total County	43	100.0%	100.0%	100.0%	100.0%	100.0%	97.7%	0.0%
Bon Homme	Avon Elementary	21	95.2%	95.2%	85.7%	85.7%	100.0%	66.7%	9.5%
Bon Homme	Hutterische Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%
Bon Homme	Scotland Elementary	23	95.7%	91.3%	95.7%	95.7%	95.7%	34.8%	4.3%
Bon Homme	Springfield Elementary	11	100.0%	100.0%	100.0%	100.0%	100.0%	45.5%	0.0%
Bon Homme	Tabor Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	66.7%	0.0%
Bon Homme	Tyndall Elementary	26	100.0%	100.0%	100.0%	100.0%	100.0%	84.6%	0.0%
Bon Homme County	Total County	88	97.7%	96.6%	95.5%	95.5%	98.9%	58.0%	3.4%
Brookings	Dakota Prairie Elementary	118	91.5%	93.2%	94.1%	93.2%	95.8%	64.4%	2.5%
Brookings	Deubrook Elementary	18	100.0%	100.0%	100.0%	100.0%	94.4%	38.9%	0.0%
Brookings	Elkton Elementary	24	95.8%	95.8%	91.7%	91.7%	91.7%	54.2%	4.2%
Brookings	Hillcrest Elementary	74	94.6%	95.9%	93.2%	90.5%	91.9%	62.2%	5.4%
Brookings	Medary Elementary	89	96.6%	96.6%	97.8%	95.5%	96.6%	73.0%	1.1%
Brookings	Newdale Colony Elementary	<10	20.0%	0.0%	40.0%	0.0%	40.0%	0.0%	60.0%
Brookings	Norfeld Colony Elementary	<10	100.0%	100.0%	100.0%	66.7%	100.0%	33.3%	0.0%
Brookings	Red Willow Colony School	<10	80.0%	80.0%	80.0%	60.0%	80.0%	20.0%	20.0%
Brookings	Rolland Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%
Brookings	Sioux Valley Elementary	48	100.0%	100.0%	100.0%	97.9%	89.6%	62.5%	2.1%
Brookings	Volga Christian Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	66.7%	0.0%
Brookings County	Total County	391	94.1%	94.6%	94.9%	92.3%	93.4%	62.1%	3.6%
Brown	C.C. Lee Elementary	64	100.0%	100.0%	100.0%	100.0%	100.0%	54.7%	0.0%
Brown	Frederick Elementary	10	100.0%	100.0%	100.0%	90.0%	100.0%	40.0%	0.0%
Brown	Groton Area Elementary	36	97.2%	100.0%	97.2%	97.2%	100.0%	50.0%	2.8%
Brown	Henry Elementary	11	90.9%	90.9%	90.9%	90.9%	90.9%	54.5%	9.1%
Brown	Huttenville Colony	<10	50.0%	100.0%	100.0%	0.0%	100.0%	0.0%	0.0%
Brown	Lincoln Elementary	74	100.0%	100.0%	100.0%	100.0%	100.0%	62.2%	0.0%
Brown	May Overby Elementary	77	98.7%	98.7%	100.0%	100.0%	98.7%	64.9%	0.0%
Brown	Mike Miller Elementary	42	97.6%	97.6%	100.0%	100.0%	97.6%	64.3%	0.0%
Brown	O.M. Tiffany Elementary	66	98.5%	100.0%	98.5%	97.0%	100.0%	54.5%	0.0%
Brown	Simmons Elementary	71	100.0%	100.0%	98.6%	97.2%	98.6%	66.2%	0.0%
Brown	Warner Elementary	24	100.0%	100.0%	100.0%	100.0%	100.0%	54.2%	0.0%
Brown	Aberdeen Christian Elementary	13	92.3%	76.9%	76.9%	76.9%	92.3%	30.8%	23.1%
Brown	Huttenville Colony Elementary	<10	50.0%	100.0%	100.0%	0.0%	100.0%	0.0%	0.0%
Brown	Montessori School of Aberdeen	<10	100.0%	100.0%	100.0%	100.0%	88.9%	77.8%	11.1%
Brown	Roncalli Elementary	49	93.9%	93.9%	93.9%	93.9%	98.0%	42.9%	4.1%
Brown	Trinity Lutheran Elementary	13	92.3%	92.3%	92.3%	92.3%	100.0%	7.7%	0.0%
Brown County	Total County	563	97.9%	98.2%	98.0%	96.8%	98.8%	56.0%	1.4%
Brule	Chamberlain Elementary	70	100.0%	100.0%	98.6%	97.1%	100.0%	75.7%	0.0%
Brule	Grass Ranch Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%
Brule	Kimball Elementary	15	100.0%	100.0%	100.0%	100.0%	100.0%	73.3%	0.0%
Brule County	Total County	87	100.0%	100.0%	98.9%	97.7%	100.0%	73.6%	0.0%
Butte	Newell Elementary	16	100.0%	100.0%	100.0%	100.0%	87.5%	87.5%	0.0%
Butte	North Park Elementary	125	93.6%	93.6%	94.4%	94.4%	93.6%	90.4%	4.8%
Butte County	Total County	141	94.3%	94.3%	95.0%	95.0%	92.9%	90.1%	4.3%
Campbell	Herreid Elementary	10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Campbell County	Total County	10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Charles Mix	Andes Central Elementary	21	100.0%	100.0%	100.0%	95.2%	100.0%	100.0%	0.0%
Charles Mix	Cedar Grove Colony Elem	<10	75.0%	75.0%	75.0%	75.0%	100.0%	0.0%	25.0%
Charles Mix	Lakeview Colony Elementary	11	100.0%	100.0%	100.0%	100.0%	100.0%	81.8%	0.0%
Charles Mix	Marty Elementary	10	100.0%	100.0%	100.0%	100.0%	100.0%	90.0%	0.0%
Charles Mix	Platte - Geddes Elementary	32	96.9%	96.9%	96.9%	96.9%	100.0%	50.0%	0.0%
Charles Mix	Platte Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%
Charles Mix	Wagner Primary	85	96.5%	96.5%	97.6%	96.5%	97.6%	96.5%	2.4%
Charles Mix County	Total County	169	96.4%	96.4%	97.0%	95.9%	98.8%	81.1%	2.4%
Clark	Clark Elementary	20	100.0%	100.0%	100.0%	100.0%	100.0%	45.0%	5.0%
Clark	Collins Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%

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Total for South Dakota Kindergarten		12,081	96.4%	96.5%	96.7%	95.4%	94.5%	75.2%	2.0%
Clark	Fordham Colony Elementary	<10	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Clark	Hillcrest Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Clark	Mayfield Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%
Clark	Shamrock Colony Elementary	<10	75.0%	75.0%	75.0%	75.0%	75.0%	25.0%	25.0%
Clark	Silver Lake Colony	<10	66.7%	66.7%	66.7%	66.7%	100.0%	33.3%	33.3%
Clark	Willow Lake Elementary	15	100.0%	100.0%	100.0%	100.0%	100.0%	46.7%	0.0%
Clark	Wilmot Elementary	14	92.9%	92.9%	92.9%	85.7%	92.9%	64.3%	0.0%
Clark County	Total County	71	88.7%	88.7%	88.7%	87.3%	90.1%	46.5%	11.3%
Clay	Austin Elementary	82	98.8%	97.6%	98.8%	98.8%	98.8%	84.1%	0.0%
Clay	Irene-Wakonda Elementary	22	95.5%	95.5%	95.5%	95.5%	95.5%	59.1%	0.0%
Clay	St. Agnes Elementary	21	90.5%	90.5%	90.5%	85.7%	95.2%	81.0%	4.8%
Clay County	Total County	125	96.8%	96.0%	96.8%	96.0%	97.6%	79.2%	0.8%
Codington	Florence Elementary	24	100.0%	100.0%	100.0%	100.0%	100.0%	16.7%	0.0%
Codington	Jefferson Elementary	65	100.0%	100.0%	100.0%	98.5%	100.0%	47.7%	1.5%
Codington	Lincoln Elementary	62	100.0%	100.0%	100.0%	100.0%	96.8%	30.6%	1.6%
Codington	McKinley Elementary	39	100.0%	100.0%	100.0%	100.0%	94.9%	48.7%	0.0%
Codington	Mellette Elementary	35	97.1%	97.1%	97.1%	0.0%	88.6%	51.4%	0.0%
Codington	Roosevelt Elementary	52	98.1%	96.2%	98.1%	98.1%	94.2%	48.1%	0.0%
Codington	Waverly-South Shore	20	100.0%	100.0%	100.0%	100.0%	100.0%	25.0%	0.0%
Codington	Immaculate Conception	33	100.0%	100.0%	100.0%	100.0%	97.0%	21.2%	0.0%
Codington	St. Martins Elementary	17	100.0%	100.0%	100.0%	100.0%	100.0%	17.6%	0.0%
Codington	Watertown Christian Elem	23	82.6%	82.6%	82.6%	82.6%	87.0%	17.4%	4.3%
Codington County	Total County	370	98.4%	98.1%	98.4%	88.9%	95.9%	36.5%	0.8%
Corson	Little Eagle Grant School	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Corson	McIntosh Elementary	13	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Corson	McLaughlin Elementary	37	100.0%	100.0%	100.0%	100.0%	100.0%	97.3%	0.0%
Corson	Rock Creek Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Corson	Wakpala Elementary	11	100.0%	100.0%	100.0%	100.0%	100.0%	90.9%	0.0%
Corson County	Total County	76	100.0%	100.0%	100.0%	100.0%	100.0%	97.3%	0.0%
Custer	Custer Elementary	45	100.0%	100.0%	97.8%	97.8%	97.8%	66.7%	2.2%
Custer	Hermosa Elementary	27	100.0%	100.0%	100.0%	100.0%	100.0%	85.2%	3.7%
Custer County	Total County	72	100.0%	100.0%	98.6%	98.6%	98.6%	73.6%	2.8%
Davison	Ethan Elementary	11	81.8%	90.9%	90.9%	81.8%	90.9%	90.9%	9.1%
Davison	Gertie Belle Rogers Elementary	80	100.0%	100.0%	100.0%	100.0%	100.0%	86.3%	0.0%
Davison	L.B. Williams Elementary	98	93.9%	94.9%	95.9%	95.9%	95.9%	87.8%	4.1%
Davison	Longfellow Elementary	60	96.7%	98.3%	96.7%	95.0%	98.3%	90.0%	1.7%
Davison	Millbrook Colony Elementary	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Davison	Mount Vernon Elementary	11	100.0%	100.0%	100.0%	100.0%	100.0%	81.8%	0.0%
Davison	Rosedale Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Davison	John Paul II Elementary	18	100.0%	100.0%	100.0%	100.0%	94.4%	94.4%	0.0%
Davison	Mitchell Christian Elementary	17	94.1%	94.1%	94.1%	94.1%	94.1%	94.1%	5.9%
Davison County	Total County	300	96.3%	97.3%	97.3%	96.7%	97.3%	88.7%	2.3%
Day	Enemy Swim Day School	16	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Day	Waubay Elementary	17	100.0%	100.0%	100.0%	100.0%	94.1%	70.6%	0.0%
Day	Webster Area Elementary	48	93.8%	95.8%	95.8%	93.8%	97.9%	56.3%	4.2%
Day County	Total County	81	96.3%	97.5%	97.5%	96.3%	97.5%	67.9%	2.5%
Deuel	Deuel Elementary	30	100.0%	100.0%	100.0%	100.0%	100.0%	43.3%	0.0%
Deuel County	Total County	30	100.0%	100.0%	100.0%	100.0%	100.0%	43.3%	0.0%
Dewey	Cheyenne River BIE Primary	83	92.8%	95.2%	96.4%	95.2%	98.8%	95.2%	0.0%
Dewey	Timber Lake Elementary	19	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Dewey	Tiospaye Topa Elementary	15	100.0%	100.0%	100.0%	93.3%	100.0%	100.0%	0.0%
Dewey County	Total County	117	94.9%	96.6%	97.4%	95.7%	99.1%	96.6%	0.0%
Douglas	Armour Elementary	15	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Douglas	Clearfield Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Douglas	Greenwood Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Douglas	Dakota Christian Elementary	10	80.0%	80.0%	80.0%	80.0%	80.0%	30.0%	20.0%
Douglas County	Total County	25	92.9%	92.9%	92.9%	92.9%	92.9%	75.0%	7.1%
Edmunds	Bowdle Elementary	<10	88.9%	88.9%	88.9%	88.9%	88.9%	77.8%	11.1%
Edmunds	Deerfield Colony Elementary	<10	75.0%	75.0%	75.0%	75.0%	75.0%	0.0%	25.0%
Edmunds	Edmunds Central Elementary	<10	100.0%	88.9%	100.0%	100.0%	100.0%	77.8%	0.0%

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Total for South Dakota Kindergarten		12,081	96.4%	96.5%	96.7%	95.4%	94.5%	75.2%	2.0%
Edmunds	Ipswich Elementary	26	96.2%	96.2%	96.2%	88.5%	96.2%	57.7%	7.7%
Edmunds	Pembroke Colony Elementary	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Edmunds	Rosette Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%	0.0%
Edmunds County	Total County	50	94.0%	92.0%	94.0%	90.0%	90.0%	58.0%	8.0%
Fall River	Edgemont Elementary	10	90.0%	90.0%	90.0%	90.0%	100.0%	70.0%	0.0%
Fall River	Elk Mountain Elementary	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Fall River	Hot Springs Elementary	54	83.3%	83.3%	83.3%	83.3%	83.3%	64.8%	9.3%
Fall River	Oelrichs Elementary	<10	100.0%	100.0%	83.3%	83.3%	100.0%	83.3%	0.0%
Fall River	Bethesda Lutheran Elementary	<10	50.0%	50.0%	50.0%	50.0%	100.0%	50.0%	50.0%
Fall River County	Total County	74	83.8%	83.8%	82.4%	82.4%	87.8%	66.2%	9.5%
Faulk	Blumengard Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Faulk	Brentwood Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	33.3%	0.0%
Faulk	Faulton Elementary	20	100.0%	100.0%	100.0%	100.0%	100.0%	60.0%	0.0%
Faulk	Thunderbird Colony Elem	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Faulk County	Total County	33	100.0%	100.0%	100.0%	100.0%	100.0%	69.7%	0.0%
Grant	Big Stone City Elementary	12	91.7%	91.7%	91.7%	91.7%	91.7%	58.3%	8.3%
Grant	Grant-Deuel Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	20.0%	0.0%
Grant	Koch Elementary	58	100.0%	100.0%	100.0%	98.3%	94.8%	46.6%	0.0%
Grant	St. Lawrence Elementary	13	100.0%	100.0%	100.0%	100.0%	100.0%	38.5%	0.0%
Grant County	Total County	88	98.9%	98.9%	98.9%	97.7%	95.5%	45.5%	1.1%
Gregory	Burke Elementary	18	94.4%	94.4%	94.4%	88.9%	100.0%	27.8%	0.0%
Gregory	Gregory Elementary	23	100.0%	100.0%	100.0%	95.7%	100.0%	47.8%	0.0%
Gregory	South Central Elementary	13	100.0%	100.0%	100.0%	92.3%	100.0%	53.8%	0.0%
Gregory County	Total County	54	98.1%	98.1%	98.1%	92.6%	100.0%	42.6%	0.0%
Haakon	Big White Elementary	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Haakon	Midland Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	66.7%	0.0%
Haakon	Milesville Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	50.0%	0.0%
Haakon	Philip Elementary	19	94.7%	94.7%	94.7%	94.7%	89.5%	68.4%	5.3%
Haakon County	Total County	26	96.2%	96.2%	96.2%	96.2%	92.3%	65.4%	3.8%
Hamlin	Castlewood Elementary	18	100.0%	94.4%	94.4%	100.0%	100.0%	55.6%	5.6%
Hamlin	Claremont Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%
Hamlin	Estelline Elementary	29	89.7%	89.7%	89.7%	89.7%	100.0%	34.5%	0.0%
Hamlin	Hamlin Elementary	66	95.5%	97.0%	97.0%	89.4%	90.9%	42.4%	3.0%
Hamlin	Poinsett Colony Elementary	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hamlin County	Total County	116	94.8%	94.8%	94.8%	91.4%	94.8%	41.4%	2.6%
Hand	Miller Elementary	32	90.6%	90.6%	90.6%	87.5%	93.8%	46.9%	6.3%
Hand	Millerdale Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Hand	Sunshine Bible Elementary	<10	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Hand County	Total County	34	88.2%	88.2%	91.2%	88.2%	94.1%	50.0%	5.9%
Hanson	Oaklane Colony Elem	<10	85.7%	71.4%	71.4%	71.4%	71.4%	71.4%	14.3%
Hanson	Bridgewater-Emery Elementary	23	95.7%	95.7%	95.7%	95.7%	91.3%	73.9%	0.0%
Hanson	Hanson Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	96.0%	0.0%
Hanson	Rockport Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Hanson County	Total County	58	96.6%	94.8%	94.8%	94.8%	93.1%	84.5%	1.7%
Harding	Buffalo Elementary	14	100.0%	100.0%	100.0%	100.0%	100.0%	78.6%	0.0%
Harding	Camp Crook Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Harding	Ludlow Elementary	<10	100.0%	100.0%	50.0%	50.0%	50.0%	50.0%	0.0%
Harding County	Total County	18	100.0%	100.0%	94.4%	94.4%	94.4%	77.8%	0.0%
Hughes	Blunt Elementary	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hughes	Buchanan Elementary	64	96.9%	96.9%	96.9%	96.9%	98.4%	50.0%	1.6%
Hughes	Jefferson Elementary	82	98.8%	98.8%	98.8%	97.6%	100.0%	62.2%	0.0%
Hughes	Kennedy Elementary	69	97.1%	97.1%	97.1%	97.1%	98.6%	63.8%	1.4%
Hughes	For His Glory School	<10	100.0%	100.0%	85.7%	100.0%	100.0%	28.6%	0.0%
Hughes	St. Joseph Elementary	31	96.8%	96.8%	100.0%	100.0%	100.0%	54.8%	0.0%
Hughes County	Total County	253	97.6%	97.6%	97.6%	97.6%	99.2%	57.7%	0.8%
Hutchinson	Freeman Elementary	22	86.4%	90.9%	86.4%	86.4%	90.9%	59.1%	4.5%
Hutchinson	Jamesville Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Hutchinson	Maxwell Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%
Hutchinson	Menno Elementary	10	100.0%	100.0%	100.0%	100.0%	100.0%	60.0%	0.0%
Hutchinson	New Elm Spring Colony	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%

County	School Name	Students	4-DTaP	4-Polio	2-MMR	2-VAR	3-HBV	2-HAV	Exempt
Total for South Dakota Kindergarten		12,081	96.4%	96.5%	96.7%	95.4%	94.5%	75.2%	2.0%
Hutchinson	Old Elm Spring Colony	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Hutchinson	Our Home	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hutchinson	Parkston Elementary	33	93.9%	93.9%	93.9%	90.9%	97.0%	90.9%	3.0%
Hutchinson	Tripp Elementary	12	91.7%	91.7%	91.7%	91.7%	100.0%	91.7%	0.0%
Hutchinson	Tschetter Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Hutchinson	Wolf Creek Colony Elementary	<10	80.0%	100.0%	100.0%	100.0%	80.0%	0.0%	0.0%
Hutchinson County	Total County	96	92.7%	94.8%	93.8%	92.7%	95.8%	71.9%	2.1%
Hyde	Crow Creek Elementary	30	96.7%	96.7%	96.7%	96.7%	96.7%	96.7%	0.0%
Hyde	Highmore Elementary	20	100.0%	100.0%	100.0%	100.0%	100.0%	60.0%	0.0%
Hyde County	Total County	50	98.0%	98.0%	98.0%	98.0%	98.0%	82.0%	0.0%
Jackson	Crazy Horse Elementary	33	100.0%	100.0%	100.0%	97.0%	100.0%	100.0%	0.0%
Jackson	Interior Elementary	<10	100.0%	100.0%	100.0%	100.0%	88.9%	66.7%	0.0%
Jackson	Kadoka Elementary	11	100.0%	100.0%	100.0%	100.0%	90.9%	90.9%	9.1%
Jackson	Longvalley Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	75.0%	0.0%
Jackson County	Total County	57	100.0%	100.0%	100.0%	98.2%	96.5%	91.2%	1.8%
Jerauld	Spring Valley Colony	<10	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	25.0%
Jerauld	Wessington Springs Elementary	23	100.0%	100.0%	100.0%	95.7%	100.0%	78.3%	0.0%
Jerauld County	Total County	27	96.3%	96.3%	96.3%	92.6%	96.3%	77.8%	3.7%
Jones County	Total County	16	93.8%	93.8%	100.0%	93.8%	87.5%	62.5%	0.0%
Kingsbury	Arlington Elementary	24	100.0%	100.0%	100.0%	100.0%	100.0%	50.0%	0.0%
Kingsbury	Iroquois Elementary	18	77.8%	77.8%	77.8%	77.8%	100.0%	88.9%	0.0%
Kingsbury	Lake Preston Elementary	11	100.0%	100.0%	100.0%	90.9%	100.0%	36.4%	0.0%
Kingsbury	Laura Ingalls Wilder Elementary	31	96.8%	96.8%	96.8%	96.8%	96.8%	51.6%	0.0%
Kingsbury	Pearl Creek Colony Elementary	<10	66.7%	66.7%	66.7%	66.7%	100.0%	33.3%	0.0%
Kingsbury County	Total County	87	93.1%	93.1%	93.1%	92.0%	98.9%	56.3%	0.0%
Lake	Camridge Colony School	<10	33.3%	33.3%	33.3%	33.3%	66.7%	0.0%	66.7%
Lake	Chester Elementary	24	95.8%	95.8%	95.8%	95.8%	100.0%	66.7%	0.0%
Lake	Gracevale Colony	<10	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%
Lake	Madison Elementary	86	95.3%	96.5%	95.3%	95.3%	98.8%	59.3%	0.0%
Lake	Oldham-Ramona Elementary	11	90.9%	90.9%	90.9%	81.8%	90.9%	27.3%	0.0%
Lake	Rustic Acres Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%
Lake	Rutland Elementary	13	92.3%	92.3%	92.3%	92.3%	100.0%	61.5%	7.7%
Lake	Spring Lake Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	50.0%	0.0%
Lake	Madison Christian Elementary	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Lake	St. Thomas Elementary	5	80.0%	80.0%	60.0%	60.0%	80.0%	40.0%	20.0%
Lake County	Total County	152	92.1%	92.8%	91.4%	90.8%	96.7%	53.9%	3.9%
Lawrence	Lead-Deadwood Elementary	41	92.7%	92.7%	92.7%	87.8%	87.8%	70.7%	2.4%
Lawrence	Mountain View Elementary	187	97.3%	97.9%	97.3%	96.3%	96.3%	85.0%	2.1%
Lawrence	Whitewood Elementary	19	84.2%	84.2%	84.2%	84.2%	73.7%	78.9%	10.5%
Lawrence County	Total County	247	95.5%	96.0%	95.5%	93.9%	93.1%	82.2%	2.8%
Lincoln	Endeavor Elementary	69	94.2%	94.2%	94.2%	94.2%	94.2%	75.4%	0.0%
Lincoln	Freedom Elementary	68	98.5%	98.5%	98.5%	98.5%	97.1%	76.5%	1.5%
Lincoln	Journey Elementary	55	98.2%	98.2%	98.2%	98.2%	100.0%	80.0%	1.8%
Lincoln	Lawrence Elementary	54	96.3%	96.3%	96.3%	96.3%	94.4%	85.2%	3.7%
Lincoln	Lennox Elementary	63	96.8%	95.2%	95.2%	93.7%	92.1%	76.2%	6.3%
Lincoln	Liberty Elementary	78	88.5%	88.5%	88.5%	88.5%	75.6%	70.5%	7.7%
Lincoln	Tea Area Frontier Elementary	21	95.2%	95.2%	95.2%	95.2%	95.2%	76.2%	0.0%
Lincoln	Tea Area Legacy Elementary	117	94.9%	94.0%	92.3%	92.3%	91.5%	69.2%	0.0%
Lincoln	Worthing Elementary	18	100.0%	100.0%	100.0%	100.0%	100.0%	77.8%	0.0%
Lincoln	Ban Dek Montessori	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Lincoln County	Total County	547	95.2%	94.9%	94.5%	94.3%	92.0%	75.3%	2.6%
Lyman	Kennebec Elementary	15	93.3%	93.3%	93.3%	93.3%	93.3%	80.0%	6.7%
Lyman	Lower Brule Elementary	38	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Lyman	Presho Elementary	18	100.0%	100.0%	100.0%	100.0%	100.0%	61.1%	0.0%
Lyman County	Total County	71	98.6%	98.6%	98.6%	98.6%	98.6%	85.9%	1.4%
Marshall	Britton-Hecla Elementary	33	93.9%	93.9%	93.9%	93.9%	97.0%	75.8%	6.1%
Marshall	Langford Area Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	55.6%	0.0%
Marshall	Newport Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%
Marshall	Sunset Colony Elementary	<10	100.0%	100.0%	100.0%	50.0%	100.0%	25.0%	0.0%
Marshall	Westwood Rural Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%

County	School Name	Students	4-DTaP	4-Polio	2-MMR	2-VAR	3-HBV	2-HAV	Exempt
Total for South Dakota Kindergarten		12,081	96.4%	96.5%	96.7%	95.4%	94.5%	75.2%	2.0%
Marshall County	Total County	49	95.9%	95.9%	95.9%	91.8%	98.0%	63.3%	4.1%
McCook	Canistota Elementary	14	85.7%	85.7%	85.7%	85.7%	92.9%	42.9%	0.0%
McCook	Goldenview Colony School	<10	66.7%	66.7%	66.7%	66.7%	100.0%	0.0%	0.0%
McCook	McCook Central Elementary	27	85.2%	77.8%	81.5%	81.5%	92.6%	66.7%	3.7%
McCook	Montrose Elementary	22	100.0%	100.0%	100.0%	100.0%	100.0%	95.5%	0.0%
McCook	Orland Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%
McCook	St. Mary's Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	80.0%	0.0%
McCook County	Total County	76	90.8%	88.2%	89.5%	89.5%	96.1%	64.5%	1.3%
McPherson	Eureka Elementary	16	93.8%	93.8%	93.8%	93.8%	50.0%	50.0%	6.3%
McPherson	Grassland Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%
McPherson	Leola Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	75.0%	0.0%
McPherson	Long Lake Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	33.3%	0.0%
McPherson	Spring Creek Colony Elem	<10	0.0%	0.0%	0.0%	0.0%	60.0%	0.0%	100.0%
McPherson County	Total County	33	81.8%	81.8%	81.8%	81.8%	69.7%	45.5%	18.2%
Meade	Atall Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Meade	Black Hawk Elementary	55	98.2%	98.2%	98.2%	98.2%	98.2%	89.1%	1.8%
Meade	Elm Springs Elementary	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Meade	Enning/Union Center	<10	88.9%	88.9%	88.9%	88.9%	100.0%	88.9%	11.1%
Meade	Faith Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Meade	Hereford Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Meade	Maurine Elementary	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Meade	Opal Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%
Meade	Piedmont Valley Elementary	97	91.8%	91.8%	91.8%	91.8%	79.4%	74.2%	7.2%
Meade	Sturgis Elementary	115	95.7%	95.7%	95.7%	95.7%	82.6%	76.5%	0.9%
Meade County	Total County	290	94.8%	94.8%	94.8%	94.8%	85.9%	79.3%	3.8%
Mellette	Norris Elementary	<10	83.3%	83.3%	100.0%	100.0%	100.0%	100.0%	0.0%
Mellette	White River Elementary	29	89.7%	89.7%	89.7%	89.7%	86.2%	86.2%	0.0%
Mellette County	Total County	35	88.6%	88.6%	91.4%	91.4%	88.6%	88.6%	0.0%
Miner	Howard Elementary	23	91.3%	91.3%	91.3%	87.0%	100.0%	91.3%	0.0%
Miner	Shannon Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Miner County	Total County	27	92.6%	92.6%	92.6%	88.9%	100.0%	92.6%	0.0%
Minnehaha	All City Elementary	19	100.0%	100.0%	100.0%	100.0%	100.0%	84.2%	36.8%
Minnehaha	Anne Sullivan Elementary	96	99.0%	99.0%	99.0%	95.8%	95.8%	87.5%	1.0%
Minnehaha	Baltic Elementary	37	100.0%	100.0%	100.0%	100.0%	100.0%	83.8%	0.0%
Minnehaha	Behavioral Care Specialist-SF	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Minnehaha	Brandon Elementary	96	97.9%	97.9%	97.9%	97.9%	97.9%	71.9%	2.1%
Minnehaha	Bridges at Horace Mann	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Minnehaha	Cleveland Elementary	93	96.8%	96.8%	98.9%	98.9%	91.4%	84.9%	1.1%
Minnehaha	Dell Rapids Elementary	72	97.2%	97.2%	97.2%	97.2%	95.8%	84.7%	2.8%
Minnehaha	Discovery Elementary	140	99.3%	98.6%	99.3%	97.9%	95.7%	81.4%	1.4%
Minnehaha	Elementary Immersion Center	19	84.2%	84.2%	89.5%	68.4%	73.7%	68.4%	0.0%
Minnehaha	Eugene Field A+ Elementary	71	94.4%	94.4%	95.8%	94.4%	93.0%	78.9%	5.6%
Minnehaha	Explorer Elementary	55	96.4%	96.4%	98.2%	98.2%	98.2%	85.5%	3.6%
Minnehaha	Fred Assam Elementary	118	96.6%	97.5%	97.5%	97.5%	95.8%	85.6%	2.5%
Minnehaha	Garfield Elementary	99	99.0%	99.0%	99.0%	98.0%	93.9%	83.8%	1.0%
Minnehaha	Garretson Elementary	30	100.0%	100.0%	100.0%	100.0%	100.0%	66.7%	0.0%
Minnehaha	Harvey Dunn Elementary	81	98.8%	98.8%	98.8%	98.8%	93.8%	77.8%	1.2%
Minnehaha	Hawthorne Elementary	54	98.1%	98.1%	98.1%	98.1%	98.1%	90.7%	0.0%
Minnehaha	Hayward Elementary	110	97.3%	98.2%	96.4%	94.5%	98.2%	83.6%	0.9%
Minnehaha	Horizon Elementary	37	100.0%	100.0%	100.0%	100.0%	97.3%	70.3%	0.0%
Minnehaha	John F. Kennedy Elementary	101	97.0%	98.0%	98.0%	98.0%	97.0%	77.2%	4.0%
Minnehaha	John Harris Elementary	118	100.0%	100.0%	99.2%	99.2%	99.2%	89.0%	0.0%
Minnehaha	Laura B. Anderson Elementary	50	96.0%	96.0%	96.0%	96.0%	96.0%	82.0%	4.0%
Minnehaha	Laura Wilder Elementary	91	98.9%	98.9%	98.9%	98.9%	93.4%	87.9%	1.1%
Minnehaha	LifeScape Children's Specialty	<10	100.0%	100.0%	100.0%	75.0%	75.0%	50.0%	0.0%
Minnehaha	Lowell Elementary	85	96.5%	97.6%	100.0%	97.6%	98.8%	89.4%	0.0%
Minnehaha	Oscar Howe Elementary	95	97.9%	97.9%	100.0%	98.9%	92.6%	78.9%	1.1%
Minnehaha	R.F. Pettigrew Elementary	148	98.0%	98.0%	98.0%	97.3%	97.3%	77.0%	2.7%
Minnehaha	Renberg Elementary	46	97.8%	97.8%	100.0%	100.0%	100.0%	84.8%	0.0%
Minnehaha	Robert Bennis Elementary	78	98.7%	98.7%	100.0%	100.0%	96.2%	67.9%	0.0%

County	School Name	Students	4-DTaP	4-Polio	2-MMR	2-VAR	3-HBV	2-HAV	Exempt
Total for South Dakota Kindergarten		12,081	96.4%	96.5%	96.7%	95.4%	94.5%	75.2%	2.0%
Minnehaha	Robert Frost Elementary	91	91.2%	91.2%	91.2%	90.1%	93.4%	75.8%	6.6%
Minnehaha	Rosa Parks Elementary	91	91.2%	92.3%	91.2%	90.1%	82.4%	74.7%	6.6%
Minnehaha	Sioux Falls Children's Home	<10	87.5%	87.5%	100.0%	100.0%	87.5%	100.0%	0.0%
Minnehaha	Sonia Sotomayor Elementary	135	96.3%	94.8%	96.3%	94.1%	85.9%	77.8%	3.7%
Minnehaha	Susan B. Anthony Elementary	92	95.7%	96.7%	96.7%	95.7%	92.4%	76.1%	1.1%
Minnehaha	Terry Redlin Elementary	77	98.7%	98.7%	97.4%	97.4%	97.4%	83.1%	0.0%
Minnehaha	Tri-Valley Elementary	67	100.0%	100.0%	100.0%	100.0%	100.0%	86.6%	0.0%
Minnehaha	Valley Springs Elementary	23	100.0%	100.0%	100.0%	100.0%	100.0%	65.2%	0.0%
Minnehaha	West Central Hartford	70	98.6%	97.1%	100.0%	98.6%	100.0%	82.9%	0.0%
Minnehaha	West Central Humboldt	22	100.0%	100.0%	100.0%	100.0%	95.5%	81.8%	0.0%
Minnehaha	Bethel Lutheran Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%
Minnehaha	Christ the King Elementary	16	100.0%	100.0%	100.0%	100.0%	100.0%	81.3%	0.0%
Minnehaha	Good Shepherd Elementary	10	100.0%	100.0%	100.0%	100.0%	100.0%	90.0%	0.0%
Minnehaha	Holy Spirit Elementary	31	100.0%	100.0%	100.0%	100.0%	100.0%	83.9%	0.0%
Minnehaha	McCrossan Boys Ranch	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Minnehaha	Sioux Falls Christian Elementary	105	94.3%	94.3%	92.4%	90.5%	90.5%	72.4%	5.7%
Minnehaha	Sioux Falls Lutheran Elem	24	95.8%	95.8%	95.8%	95.8%	87.5%	79.2%	0.0%
Minnehaha	St. Katharine Drexel Elem	21	95.2%	95.2%	95.2%	95.2%	90.5%	66.7%	4.8%
Minnehaha	St. Lambert Elementary	13	100.0%	100.0%	92.3%	92.3%	100.0%	61.5%	0.0%
Minnehaha	St. Mary Elementary	52	98.1%	98.1%	100.0%	98.1%	94.2%	90.4%	0.0%
Minnehaha	St. Mary's Elementary	21	90.5%	85.7%	85.7%	81.0%	81.0%	61.9%	19.0%
Minnehaha	St. Michael Elementary	21	100.0%	100.0%	100.0%	100.0%	100.0%	81.0%	0.0%
Minnehaha County	Total County	3036	97.3%	97.3%	97.6%	96.7%	94.9%	80.5%	2.2%
Moody	Colman Elementary	18	94.4%	94.4%	94.4%	94.4%	94.4%	61.1%	5.6%
Moody	Flandreau Elementary	55	100.0%	100.0%	100.0%	100.0%	100.0%	65.5%	0.0%
Moody	Pleasant Valley Colony	<10	100.0%	100.0%	100.0%	75.0%	100.0%	25.0%	0.0%
Moody County	Total County	77	98.7%	98.7%	98.7%	97.4%	98.7%	62.3%	1.3%
Oglala Lakota	Our Lady of Lourdes Elem	16	93.8%	93.8%	93.8%	93.8%	93.8%	75.0%	0.0%
Oglala Lakota	Red Cloud Elementary	25	80.0%	80.0%	80.0%	80.0%	88.0%	84.0%	8.0%
Oglala Lakota	American Horse Elementary	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Oglala Lakota	Batesland School	20	95.0%	75.0%	75.0%	60.0%	100.0%	15.0%	0.0%
Oglala Lakota	Isna Wica Owayawa-No report								
Oglala Lakota	Little Wound Elementary	60	98.3%	98.3%	98.3%	98.3%	98.3%	96.7%	1.7%
Oglala Lakota	Pine Ridge Elementary	49	98.0%	98.0%	98.0%	95.9%	95.9%	98.0%	2.0%
Oglala Lakota	Porcupine Elementary	15	93.3%	93.3%	93.3%	93.3%	100.0%	93.3%	0.0%
Oglala Lakota	Red Shirt School	11	100.0%	100.0%	100.0%	100.0%	100.0%	90.9%	0.0%
Oglala Lakota	Rockyford School	44	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Oglala Lakota	Wolf Creek School	86	97.7%	98.8%	98.8%	98.8%	97.7%	86.0%	1.2%
Oglala Lakota	Wounded Knee Elementary	26	100.0%	100.0%	100.0%	88.5%	100.0%	100.0%	0.0%
Oglala Lakota Co	Total County	352	96.6%	95.7%	95.7%	93.8%	97.4%	88.1%	1.4%
Pennington	Badger Clark Elementary	248	98.8%	98.8%	98.8%	98.0%	67.7%	62.1%	1.2%
Pennington	Behavioral Care Specialists- RC	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Pennington	Bison Elementary	6	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Pennington	Black Hills Children's Home	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Pennington	Canyon Lake Elementary	73	95.9%	98.6%	98.6%	98.6%	90.4%	89.0%	1.4%
Pennington	Corral Drive Elementary	61	98.4%	98.4%	98.4%	98.4%	93.4%	86.9%	1.6%
Pennington	General Beadle Elementary	71	97.2%	97.2%	97.2%	94.4%	98.6%	94.4%	2.8%
Pennington	Grandview Elementary	83	97.6%	98.8%	98.8%	96.4%	98.8%	89.2%	2.4%
Pennington	Hill City Elementary	34	97.1%	97.1%	100.0%	100.0%	100.0%	85.3%	0.0%
Pennington	Horace Mann Elementary	45	100.0%	100.0%	100.0%	115.6%	97.8%	93.3%	0.0%
Pennington	Knollwood Heights Elementary	62	100.0%	100.0%	100.0%	100.0%	91.9%	95.2%	0.0%
Pennington	Meadowbrook Elementary	80	100.0%	100.0%	100.0%	100.0%	92.5%	91.3%	0.0%
Pennington	New Underwood Elementary	12	100.0%	100.0%	100.0%	100.0%	75.0%	58.3%	0.0%
Pennington	Pinedale Elementary	58	100.0%	100.0%	100.0%	100.0%	98.3%	91.4%	0.0%
Pennington	Rapid Valley Elementary	90	97.8%	97.8%	97.8%	97.8%	90.0%	80.0%	2.2%
Pennington	Robbinsdale Elementary	94	98.9%	98.9%	100.0%	97.9%	98.9%	95.7%	1.1%
Pennington	South Canyon Elementary	46	95.7%	97.8%	97.8%	97.8%	93.5%	78.3%	2.2%
Pennington	South Park Elementary	46	97.8%	97.8%	97.8%	95.7%	97.8%	97.8%	2.2%
Pennington	Valley View Elementary	101	97.0%	98.0%	99.0%	98.0%	98.0%	92.1%	0.0%
Pennington	Wall Elementary	15	100.0%	100.0%	100.0%	100.0%	100.0%	86.7%	0.0%

County	School Name	Students	4-DTaP	4-Polio	2-MMR	2-VAR	3-HBV	2-HAV	Exempt
Total for South Dakota Kindergarten		12,081	96.4%	96.5%	96.7%	95.4%	94.5%	75.2%	2.0%
Pennington	Woodrow Wilson Elementary	52	98.1%	98.1%	98.1%	98.1%	88.5%	84.6%	1.9%
Pennington	Calvary Christian Elementary	37	62.2%	64.9%	64.9%	64.9%	83.8%	73.0%	2.7%
Pennington	Children's House Montessori	<10	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Pennington	Lakota Woglaka Wounspe	<10	100.0%	100.0%	100.0%	100.0%	100.0%	50.0%	0.0%
Pennington	Rapid City Lutheran	27	100.0%	100.0%	96.3%	96.3%	96.3%	77.8%	0.0%
Pennington	St. Elizabeth Seton	42	100.0%	100.0%	100.0%	100.0%	95.2%	92.9%	0.0%
Pennington	St. Paul's Elementary	11	90.9%	90.9%	90.9%	81.8%	81.8%	72.7%	9.1%
Pennington County	Total County	1402	97.3%	97.7%	97.9%	97.6%	89.8%	83.9%	1.3%
Perkins	Lemmon Elementary	20	95.0%	95.0%	95.0%	95.0%	100.0%	95.0%	5.0%
Perkins County	Total County	20	95.0%	95.0%	95.0%	95.0%	100.0%	95.0%	5.0%
Potter	Gettysburg Elementary	18	100.0%	100.0%	100.0%	100.0%	100.0%	38.9%	0.0%
Potter	Hoven Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	83.3%	0.0%
Potter County	Total County	24	100.0%	100.0%	100.0%	100.0%	100.0%	50.0%	0.0%
Roberts	Rosholt/ White Rock Colony	14	92.9%	92.9%	92.9%	85.7%	92.9%	78.6%	7.1%
Roberts	Sisseton Elementary	97	99.0%	99.0%	100.0%	93.8%	97.9%	89.7%	0.0%
Roberts	Summit Elementary	<10	87.5%	87.5%	87.5%	87.5%	100.0%	87.5%	0.0%
Roberts	Tiropa Zina Elementary	42	100.0%	100.0%	100.0%	97.6%	100.0%	100.0%	0.0%
Roberts County	Total County	161	98.1%	98.1%	98.8%	93.8%	98.1%	91.3%	0.6%
Sanborn	Sanborn Central Elementary	14	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Sanborn	Upland Colony Elementary	<10	40.0%	40.0%	80.0%	80.0%	60.0%	0.0%	20.0%
Sanborn	Woonsocket Elementary	18	94.4%	88.9%	94.4%	88.9%	88.9%	83.3%	0.0%
Sanborn County	Total County	37	89.2%	86.5%	94.6%	91.9%	89.2%	78.4%	2.7%
Spink	Camrose Colony Elementary	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Spink	Clark Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Spink	Doland Elementary	10	100.0%	100.0%	100.0%	100.0%	100.0%	30.0%	0.0%
Spink	Glendale Colony Elementary	<10	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	0.0%
Spink	Hillside Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Spink	Northwestern Elementary	11	100.0%	100.0%	90.9%	100.0%	100.0%	63.6%	9.1%
Spink	Redfield Elementary	43	97.7%	97.7%	97.7%	97.7%	97.7%	48.8%	2.3%
Spink	Spink Colony Elementary	<10	50.0%	50.0%	75.0%	75.0%	75.0%	25.0%	0.0%
Spink County	Total County	75	94.7%	94.7%	94.7%	96.0%	96.0%	50.7%	2.7%
Stanley	Cheyenne Elementary	<10	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%	0.0%
Stanley	Stanley County Elementary	26	92.3%	96.2%	96.2%	96.2%	0.0%	0.0%	0.0%
Stanley County	Total County	28	92.9%	96.4%	96.4%	96.4%	0.0%	0.0%	0.0%
Sully	Onida & Blunt Elementary	12	83.3%	83.3%	83.3%	83.3%	83.3%	41.7%	8.3%
Sully County	Total County	12	83.3%	83.3%	83.3%	83.3%	83.3%	41.7%	8.3%
Todd	He Dog Elementary	34	100.0%	100.0%	100.0%	100.0%	97.1%	91.2%	0.0%
Todd	Klein Elementary	<10	100.0%	100.0%	100.0%	100.0%	80.0%	60.0%	0.0%
Todd	Lakeview Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Todd	Littleburg Elementary	<10	87.5%	87.5%	87.5%	87.5%	87.5%	100.0%	0.0%
Todd	O'Kreek Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	83.3%	0.0%
Todd	Rosebud Elementary	56	100.0%	100.0%	100.0%	98.2%	100.0%	100.0%	0.0%
Todd	Spring Creek Elementary	10	90.0%	90.0%	100.0%	90.0%	90.0%	100.0%	0.0%
Todd	St. Francis Elementary	49	85.7%	87.8%	87.8%	85.7%	100.0%	98.0%	0.0%
Todd	Todd County Elementary	107	97.2%	97.2%	98.1%	98.1%	99.1%	95.3%	0.0%
Todd	Sapa Un Catholic Academy	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Todd	White Eagle Elementary	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Todd County	Total County	284	95.8%	96.1%	96.8%	95.8%	98.2%	95.8%	0.0%
Tripp	Colome Elementary	13	100.0%	100.0%	100.0%	100.0%	100.0%	38.5%	0.0%
Tripp	Winner Elementary	87	97.7%	97.7%	97.7%	97.7%	98.9%	31.0%	1.1%
Tripp	Wood Elementary	<10	100.0%	100.0%	100.0%	50.0%	100.0%	50.0%	0.0%
Tripp County	Total County	102	98.0%	98.0%	98.0%	97.1%	99.0%	32.4%	1.0%
Turner	Cameron Colony Elementary	<10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Turner	Centerville Elementary	25	88.0%	84.0%	88.0%	88.0%	80.0%	80.0%	4.0%
Turner	Marion Elementary	16	81.3%	81.3%	81.3%	81.3%	81.3%	75.0%	18.8%
Turner	Parker Elementary	26	96.2%	100.0%	96.2%	96.2%	96.2%	84.6%	0.0%
Turner	Viborg-Hurley Elementary	30	100.0%	100.0%	100.0%	100.0%	100.0%	76.7%	0.0%
Turner County	Total County	98	92.9%	92.9%	92.9%	92.9%	90.8%	79.6%	4.1%
Union	Alcester-Hudson Elementary	35	100.0%	100.0%	100.0%	100.0%	100.0%	82.9%	0.0%
Union	Beresford Elementary	44	97.7%	97.7%	97.7%	97.7%	93.2%	86.4%	2.3%

County	School Name	Students	4-DTaP	4-Polio	2-MMR	2-VAR	3-HBV	2-HAV	Exempt
Total for South Dakota Kindergarten		12,081	96.4%	96.5%	96.7%	95.4%	94.5%	75.2%	2.0%
Union	Dakota Valley Elementary	96	100.0%	100.0%	100.0%	97.9%	82.3%	80.2%	0.0%
Union	Elk Point-Jefferson Elementary	40	100.0%	100.0%	100.0%	100.0%	95.0%	90.0%	0.0%
Union County	Total County	215	99.5%	99.5%	99.5%	98.6%	89.8%	83.7%	0.5%
Walworth	Freeman Davis Elementary	45	95.6%	95.6%	95.6%	95.6%	93.3%	91.1%	4.4%
Walworth	Selby Elementary	14	100.0%	100.0%	100.0%	100.0%	100.0%	92.9%	0.0%
Walworth County	Total County	59	96.6%	96.6%	96.6%	96.6%	94.9%	91.5%	3.4%
Yankton	Beadle Elementary	59	96.6%	96.6%	96.6%	94.9%	98.3%	69.5%	0.0%
Yankton	Gayville-Volin Elementary	19	100.0%	100.0%	100.0%	100.0%	100.0%	78.9%	0.0%
Yankton	Lincoln Elementary	60	100.0%	100.0%	98.3%	100.0%	98.3%	71.7%	0.0%
Yankton	Stewart Elementary	48	95.8%	97.9%	97.9%	93.8%	93.8%	62.5%	2.1%
Yankton	Webster Elementary	23	100.0%	100.0%	100.0%	100.0%	100.0%	82.6%	0.0%
Yankton	Sacred Heart Elementary	36	100.0%	100.0%	100.0%	100.0%	94.4%	47.2%	0.0%
Yankton County	Total County	245	98.4%	98.8%	98.4%	97.6%	97.1%	67.3%	0.4%
Ziebach	Dupree Elementary	32	93.8%	96.9%	96.9%	93.8%	93.8%	96.9%	0.0%
Ziebach	Takini Elementary	10	100.0%	100.0%	100.0%	90.0%	70.0%	100.0%	0.0%
Ziebach County	Total County	42	95.2%	97.6%	97.6%	92.9%	88.1%	97.6%	0.0%

6th Grade Vaccination 2016-2017 School Year — Healthy Kids, Healthy Families, Healthy Schools, Healthy Communities, Healthy South Dakota

For the 2016-2017 6th grade class 321 South Dakota schools submitted vaccination audit data. South Dakota's overall coverage rate for Tdap vaccine was 95.9% and overall coverage rate for Meningococcal (MCV4) was 95.7% while the overall exemption rate was 1.9%.

County	School Name	Students	1-Tdap	1-Men	Exempt
Total for South Dakota 6th Grade		11568	95.9%	95.7%	1.9%
Aurora	Aurora Plains Academy Middle School	<10	100.0%	100.0%	0.0%
Aurora	Corsica-Stickney Elementary	16	100.0%	100.0%	0.0%
Aurora	Plankinton Elementary	15	93.3%	93.3%	0.0%
Aurora	White Lake Elementary	<10	100.0%	100.0%	0.0%
Aurora County	Total County	41	97.6%	97.6%	0.0%
Beadle	Hitchcock-Tulare Elementary	13	92.3%	92.3%	7.7%
Beadle	Huron Colony Elementary	<10	100.0%	100.0%	0.0%
Beadle	Huron Middle School	169	89.9%	90.5%	0.0%
Beadle	Our Home ASAP	0	0.0%	0.0%	0.0%
Beadle	Our Home Rediscovery	0	0.0%	0.0%	0.0%
Beadle	Riverside Colony Elementary	<10	0.0%	0.0%	0.0%
Beadle	Wolsey-Wessington Middle School	30	80.0%	76.7%	0.0%
Beadle	Holy Trinity Catholic Elementary	10	100.0%	100.0%	0.0%
Beadle	James Valley Christian Elementary	17	82.4%	82.4%	11.8%
Beadle County	Total County	241	88.4%	88.4%	1.2%
Bennett	Martin Elementary	31	100.0%	100.0%	0.0%
Bennett	American Horse Elementary-no report				
Bennett County	Total County	31	100.0%	100.0%	0.0%
Bon Homme	Avon Elementary	23	100.0%	100.0%	0.0%
Bon Homme	Bon Homme Middle School	37	100.0%	100.0%	0.0%
Bon Homme	Hutterische Colony Elementary	<10	100.0%	100.0%	0.0%
Bon Homme	Scotland Middle School	23	91.3%	91.3%	0.0%
Bon Homme County	Total County	87	97.7%	97.7%	0.0%
Brookings	Deubrook Elementary	30	96.7%	96.7%	3.3%
Brookings	Elkton Elementary	20	100.0%	100.0%	0.0%
Brookings	George S. Mickelson Middle School	266	91.0%	90.6%	1.5%

County	School Name	Students	1-Tdap	1-Men	Exempt
	Total for South Dakota 6th Grade	11568	95.9%	95.7%	1.9%
Brookings	Newdale Colony Elementary	<10	0.0%	0.0%	100.0%
Brookings	Norfeld Colony Elementary	<10	0.0%	0.0%	0.0%
Brookings	Red Willow Colony School	0	0.0%	0.0%	0.0%
Brookings	Rolland Colony Elementary	<10	0.0%	0.0%	0.0%
Brookings	Sioux Valley Middle School	47	95.7%	95.7%	4.3%
Brookings	Volga Christian Elementary	<10	100.0%	100.0%	0.0%
Brookings County	Total County	371	91.1%	90.8%	2.4%
Brown	Aberdeen Alternative Learning Center	0	0.0%	0.0%	0.0%
Brown	Behavioral Care Specialists Learning Center - Aberdeen	0	0.0%	0.0%	0.0%
Brown	Frederick Elementary	<10	100.0%	100.0%	0.0%
Brown	Groton Area Middle School	39	100.0%	94.9%	2.6%
Brown	Holgate Middle School	180	98.3%	98.9%	1.7%
Brown	Huterville Colony	0	0.0%	0.0%	0.0%
Brown	New Beginnings	0	0.0%	0.0%	0.0%
Brown	Simmons Middle School	171	100.0%	100.0%	0.0%
Brown	Warner Middle School	26	100.0%	100.0%	0.0%
Brown	Aberdeen Christian Elementary	11	63.6%	63.6%	36.4%
Brown	Huterville Colony Elementary	0	0.0%	0.0%	0.0%
Brown	Roncalli Elementary	41	95.1%	97.6%	4.9%
Brown	Trinity Lutheran Elementary	<10	100.0%	100.0%	0.0%
Brown County	Total County	479	98.1%	98.1%	2.1%
Brule	Chamberlain Elementary	74	98.6%	97.3%	4.1%
Brule	Grass Ranch Colony Elementary	<10	100.0%	100.0%	0.0%
Brule	Kimball Middle School	21	100.0%	95.2%	0.0%
Brule	St. Joseph Elementary	23	95.7%	95.7%	0.0%
Butte	Belle Fourche Middle School	126	93.7%	92.9%	6.3%
Butte	Newell Middle School	32	100.0%	100.0%	0.0%
Butte County	Total County	278	96.4%	95.3%	4.0%
Campbell	Herreid Middle School	<10	100.0%	100.0%	0.0%
Campbell County	Total County	<10	100.0%	100.0%	0.0%
Charles Mix	Andes Central Elementary	17	100.0%	100.0%	0.0%
Charles Mix	Cedar Grove Colony Elementary	<10	83.3%	83.3%	16.7%
Charles Mix	Lakeview Colony Elementary	<10	100.0%	100.0%	0.0%
Charles Mix	Marty Middle School	13	92.3%	84.6%	0.0%
Charles Mix	Platte Colony Elementary	<10	25.0%	25.0%	75.0%
Charles Mix	Platte - Geddes Elementary	36	94.4%	94.4%	2.8%
Charles Mix	Wagner Community Middle School	71	100.0%	100.0%	0.0%
Charles Mix County	Total County	150	95.3%	94.7%	3.3%
Clark	Clark Middle School	17	100.0%	100.0%	0.0%
Clark	Collins Colony Elementary	<10	100.0%	100.0%	0.0%
Clark	Fordham Colony Elementary	<10	0.0%	0.0%	100.0%
Clark	Hillcrest Colony Elementary	<10	100.0%	100.0%	0.0%
Clark	Mayfield Colony Elementary	<10	100.0%	100.0%	0.0%
Clark	Shamrock Colony Elementary	0	0.0%	0.0%	0.0%
Clark	Silver Lake Colony	<10	100.0%	100.0%	0.0%
Clark	Willow Lake Middle School	12	100.0%	100.0%	0.0%
Clark County	Total County	44	93.2%	93.2%	6.8%
Clay	Irene-Wakonda Elementary	25	96.0%	96.0%	0.0%
Clay	Vermillion Middle School	98	99.0%	99.0%	2.0%
Clay County	Total County	123	98.4%	98.4%	1.6%
Codington	Florence Middle School	18	94.4%	94.4%	0.0%
Codington	Henry Middle School	19	89.5%	89.5%	10.5%
Codington	Watertown Intermediate School	300	98.0%	98.0%	1.7%
Codington	Waverly-South Shore Middle School	23	100.0%	100.0%	0.0%
Codington	Immaculate Conception Elementary	18	100.0%	100.0%	0.0%
Codington	St. Martins Elementary	13	100.0%	100.0%	0.0%
Codington	Watertown Christian Elementary	<10	57.1%	57.1%	0.0%
Codington County	Total County	398	97.0%	97.0%	1.8%
Corson	Little Eagle Grant School	<10	100.0%	100.0%	0.0%
Corson	McIntosh Elementary	14	100.0%	100.0%	0.0%

County	School Name	Students	1-Tdap	1-Men	Exempt
Total for South Dakota 6th Grade		11568	95.9%	95.7%	1.9%
Corson	McLaughlin Middle School	39	100.0%	100.0%	0.0%
Corson	Rock Creek Elementary	<10	100.0%	100.0%	0.0%
Corson	Wakpala Middle School	13	92.3%	92.3%	7.7%
Corson County	Total County	80	98.8%	98.8%	1.3%
Custer	Custer Elementary	55	98.2%	98.2%	0.0%
Custer	Hermosa Elementary	19	100.0%	100.0%	0.0%
Custer County	Total County	74	98.6%	98.6%	4.1%
Davison	Behavioral Care Specialists Learning Center - Mitchell	0	0.0%	0.0%	0.0%
Davison	Ethan Elementary	25	100.0%	100.0%	0.0%
Davison	Millbrook Colony Elementary	<10	100.0%	100.0%	0.0%
Davison	Mitchell Middle School	195	97.4%	97.9%	1.5%
Davison	Mount Vernon Middle School	13	92.3%	92.3%	0.0%
Davison	Rosedale Colony Elementary	<10	100.0%	100.0%	0.0%
Davison	John Paul II Elementary	24	91.7%	91.7%	8.3%
Davison	Mitchell Christian Middle School	5	80.0%	80.0%	20.0%
Davison County	Total County	266	96.6%	97.0%	2.3%
Day	Enemy Swim Day School	20	95.0%	95.0%	0.0%
Day	Waubay Middle School	13	92.3%	92.3%	0.0%
Day	Webster Area Middle School	35	97.1%	100.0%	2.9%
Day County	Total County	68	95.6%	97.1%	1.5%
Deuel	Deuel Middle School/Jr. High	35	100.0%	100.0%	0.0%
Deuel County	Total County	35	100.0%	100.0%	0.0%
Dewey	Cheyenne River BIE Upper Elementary	96	99.0%	96.9%	0.0%
Dewey	Timber Lake Middle School	31	90.3%	83.9%	0.0%
Dewey	Tiopsy Topa Elementary	13	92.3%	92.3%	0.0%
Dewey County	Total County	44	90.9%	86.4%	0.0%
Douglas	Armour Middle School	12	91.7%	91.7%	0.0%
Douglas	Clearfield Colony Elementary	<10	0.0%	0.0%	0.0%
Douglas	Greenwood Colony Elementary	<10	100.0%	50.0%	0.0%
Douglas	Dakota Christian Elementary	11	100.0%	90.9%	0.0%
Douglas County	Total County	26	92.3%	84.6%	0.0%
Edmunds	Boulder Colony	<10	100.0%	100.0%	0.0%
Edmunds	Bowdle Elementary	14	100.0%	100.0%	0.0%
Edmunds	Deerfield Colony Elementary	2	100.0%	100.0%	0.0%
Edmunds	Edmunds Central Elementary	9	100.0%	100.0%	0.0%
Edmunds	Ipswich Middle School	32	96.9%	96.9%	3.1%
Edmunds	Pembroke Colony Elementary	<10	100.0%	100.0%	0.0%
Edmunds	Rosette Colony Elementary	<10	100.0%	100.0%	100.0%
Edmunds County	Total County	60	98.3%	98.3%	3.3%
Fall River	Edgemont Elementary	11	81.8%	81.8%	0.0%
Fall River	Elk Mountain Elementary - 01	<10	100.0%	100.0%	0.0%
Fall River	Hot Springs Middle School - 06	58	86.2%	86.2%	1.7%
Fall River County	Total County	70	85.7%	85.7%	1.4%
Faulk	Blumengard Colony Elementary	<10	100.0%	100.0%	0.0%
Faulk	Brentwood Colony Elementary	<10	100.0%	100.0%	0.0%
Faulk	Faulkton Elementary	12	100.0%	100.0%	0.0%
Faulk	Thunderbird Colony Elementary	<10	100.0%	100.0%	0.0%
Faulk County	Total County	21	100.0%	100.0%	0.0%
Grant	Big Stone City Middle School	12	83.3%	83.3%	16.7%
Grant	Grant-Deuel Jr. High	<10	85.7%	85.7%	14.3%
Grant	Milbank Middle School	63	96.8%	98.4%	6.3%
Grant	St. Lawrence Elementary	11	90.9%	90.9%	9.1%
Grant County	Total County	93	93.5%	94.6%	8.6%
Gregory	Burke Elementary	16	93.8%	93.8%	6.3%
Gregory	Gregory Jr. High	24	87.5%	83.3%	0.0%
Gregory	South Central Middle School	12	91.7%	91.7%	0.0%
Gregory County	Total County	52	90.4%	88.5%	1.9%
Haakon	Big White Elementary	<10	100.0%	100.0%	0.0%
Haakon	Midland Elementary	<10	100.0%	100.0%	0.0%
Haakon	Milesville Elementary	<10	100.0%	100.0%	0.0%

County	School Name	Students	1-Tdap	1-Men	Exempt
Total for South Dakota 6th Grade		11568	95.9%	95.7%	1.9%
Haakon	Philip Elementary	22	100.0%	100.0%	0.0%
Haakon	Wall Middle School	16	100.0%	100.0%	0.0%
Haakon County	Total County	39	100.0%	100.0%	0.0%
Hamlin	Castlewood Elementary	16	100.0%	100.0%	0.0%
Hamlin	Claremont Colony Elementary	0	0.0%	0.0%	0.0%
Hamlin	Estelline Elementary	19	94.7%	94.7%	0.0%
Hamlin	Hamlin Middle School	62	100.0%	100.0%	0.0%
Hamlin	Poinsette Valley Colony	0	0.0%	0.0%	0.0%
Hamlin	Poinsett Colony Elementary	0	0.0%	0.0%	0.0%
Hamlin County	Total County	62	100.0%	100.0%	0.0%
Hand	Miller Elementary	30	100.0%	100.0%	0.0%
Hand	Millerdale Colony Elementary	<10	0.0%	0.0%	0.0%
Hand	Sunshine Bible Elementary	<10	100.0%	100.0%	0.0%
Hand County	Total County	33	97.0%	97.0%	0.0%
Hanson	Bridgewater-Emerly Middle School	15	93.3%	93.3%	0.0%
Hanson	Hanson Middle School	35	97.1%	97.1%	2.9%
Hanson	Oaklane Colony Elem	<10	66.7%	33.3%	66.6%
Hanson	Rockport Colony Elementary	<10	100.0%	100.0%	0.0%
Hanson County	Total County	39	94.9%	92.3%	7.7%
Harding	Harding County Middle School-Buffalo	12	0.0%	75.0%	0.0%
Harding	Ludlow Elementary	<10	0.0%	0.0%	0.0%
Harding County	Total County	13	0.0%	69.2%	0.0%
Hughes	Georgia Morse Middle School	208	96.6%	96.6%	50.0%
Hughes	Pierre Indian Elementary	14	92.9%	100.0%	0.0%
Hughes	For His Glory School	<10	100.0%	100.0%	0.0%
Hughes County	Total County	227	96.5%	96.9%	40.0%
Hutchinson	Freeman Elementary	17	100.0%	100.0%	0.0%
Hutchinson	Jamesville Colony Elementary	<10	100.0%	100.0%	0.0%
Hutchinson	Maxwell Colony Elementary	<10	100.0%	100.0%	0.0%
Hutchinson	Menno Middle School	22	100.0%	100.0%	0.0%
Hutchinson	New Elm Spring Colony Elementary	<10	100.0%	100.0%	0.0%
Hutchinson	Old Elm Spring Colony Elementary	0	0.0%	0.0%	0.0%
Hutchinson	Our Home	<10	100.0%	100.0%	0.0%
Hutchinson	Parkston Elementary	42	97.6%	100.0%	0.0%
Hutchinson	Tripp Elementary	10	100.0%	80.0%	10.0%
Hutchinson	Tschetter Colony Elementary	<10	100.0%	100.0%	0.0%
Hutchinson	Wolf Creek Colony Elementary	<10	100.0%	100.0%	0.0%
Hutchinson	Freeman Academy Elementary	<10	100.0%	100.0%	0.0%
Hutchinson County	Total County	112	99.1%	98.2%	0.9%
Hyde	Crow Creek Middle School	28	96.4%	96.4%	0.0%
Hyde	Highmore Elementary	18	100.0%	100.0%	0.0%
Hyde County	Total County	46	97.8%	97.8%	0.0%
Jackson	Crazy Horse Elementary	23	82.6%	82.6%	0.0%
Jackson	Interior Elementary	<10	42.9%	42.9%	0.0%
Jackson	Kadoka Elementary	15	100.0%	100.0%	6.7%
Jackson	Longvalley Elementary	<10	85.7%	85.7%	0.0%
Jackson County	Total County	52	82.7%	82.7%	1.9%
Jerauld	Spring Valley Colony Elementary	<10	100.0%	100.0%	0.0%
Jerauld	Wessington Springs Elementary	17	94.1%	88.2%	0.0%
Jerauld County	Total County	21	94.7%	89.5%	0.0%
Jones	Jones County Middle School	15	93.3%	93.3%	0.0%
Jones County	Total County	15	93.3%	93.3%	0.0%
Kingsbury	Arlington	16	100.0%	100.0%	0.0%
Kingsbury	De Smet Middle School	24	100.0%	100.0%	0.0%
Kingsbury	Iroquois Middle School	23	100.0%	87.0%	0.0%
Kingsbury	Lake Preston Elementary	11	90.9%	90.9%	9.1%
Kingsbury	Pearl Creek Colony Elementary	<10	100.0%	100.0%	0.0%
Kingsbury County	Total County	75	98.7%	94.7%	1.3%
Lake	Camridge Colony School	0	0.0%	0.0%	0.0%
Lake	Chester Middle School	32	93.8%	96.9%	6.3%

County	School Name	Students	1-Tdap	1-Men	Exempt
Total for South Dakota 6th Grade		11568	95.9%	95.7%	1.9%
Lake	Gracevale Colony	0	0.0%	0.0%	0.0%
Lake	Madison Middle School	88	95.5%	97.7%	1.1%
Lake	Oldham-Ramona Elementary	13	92.3%	92.3%	0.0%
Lake	Rustic Acres Elementary	<10	0.0%	0.0%	0.0%
Lake	Rutland Jr. High	<10	87.5%	87.5%	12.5%
Lake	Spring Lake Colony Elementary	<10	100.0%	100.0%	0.0%
Lake County	Total County	145	93.1%	95.2%	2.8%
Lawrence	Lead-Deadwood Middle School	60	93.3%	96.7%	0.0%
Lawrence	Spearfish Middle School	193	95.9%	94.3%	2.6%
Lawrence County	Total County	253	95.3%	94.9%	2.0%
Lincoln	Canton Middle School	70	100.0%	100.0%	0.0%
Lincoln	Harrisburg South Middle School	117	97.4%	97.4%	2.6%
Lincoln	Lennox Intermediate	100	99.0%	99.0%	1.0%
Lincoln	Tea Area Intermediate/Middle School	125	98.4%	99.2%	0.0%
Lincoln County	Total County	412	98.5%	98.8%	1.0%
Lyman	Lower Brule Elementary	17	100.0%	100.0%	0.0%
Lyman	Lyman Middle School	37	97.3%	97.3%	2.7%
Lyman County	Total County	54	98.1%	98.1%	1.9%
Marshall	Britton-Hecla Elementary	33	97.0%	97.0%	3.0%
Marshall	Langford Area Middle School	17	100.0%	100.0%	0.0%
Marshall	Newport Colony Elementary	<10	100.0%	100.0%	0.0%
Marshall	Sunset Colony Elementary	<10	100.0%	100.0%	0.0%
Marshall	Westwood Rural Elementary	<10	100.0%	100.0%	0.0%
Marshall County	Total County	60	98.3%	98.3%	1.7%
McCook	Canistota Middle School	20	95.0%	95.0%	5.0%
McCook	Goldenview Colony School	<10	0.0%	0.0%	0.0%
McCook	McCook Central Middle School	29	75.9%	72.4%	13.8%
McCook	Montrose Middle School	17	88.2%	88.2%	0.0%
McCook	Orland Colony Elementary	<10	100.0%	100.0%	0.0%
McCook	St. Mary's Elementary	<10	100.0%	100.0%	0.0%
McCook County	Total County	78	84.6%	83.3%	6.4%
McPherson	Eureka Middle School	11	81.8%	81.8%	0.0%
McPherson	Grassland Colony Elementary	<10	100.0%	100.0%	0.0%
McPherson	Leola Elementary	11	90.9%	90.9%	0.0%
McPherson	Long Lake Colony Elementary	0	0.0%	0.0%	0.0%
McPherson	Spring Creek Colony Elementary	<10	0.0%	0.0%	100.0%
McPherson County	Total County	25	80.0%	80.0%	8.0%
Meade	Atall Elementary	<10	100.0%	100.0%	0.0%
Meade	Enning/Union Center Elementary	<10	75.0%	75.0%	0.0%
Meade	Faith Elementary	10	100.0%	100.0%	0.0%
Meade	Hereford Elementary	<10	100.0%	100.0%	0.0%
Meade	Maurine Elementary	<10	0.0%	0.0%	0.0%
Meade	Opal Elementary	<10	100.0%	100.0%	0.0%
Meade	Piedmont Valley Elementary	79	97.5%	97.5%	2.5%
Meade	Sturgis Williams Middle School	125	92.8%	95.2%	1.6%
Meade County	Total County	228	94.3%	95.6%	1.8%
Mellette	White River Middle School	38	86.8%	84.2%	0.0%
Mellette County	Total County	38	0.0%	84.2%	0.0%
Miner	Howard Elementary	41	100.0%	100.0%	0.0%
Miner	Shannon Colony Elementary	<10	100.0%	100.0%	0.0%
Miner County	Total County	44	100.0%	100.0%	0.0%
Minnehaha	Axtell (Structured, Flex, Success)	10	100.0%	100.0%	0.0%
Minnehaha	Baltic Middle School	41	100.0%	100.0%	0.0%
Minnehaha	Behavioral Care Specialists Learning Center - Sioux Falls	0	0.0%	0.0%	0.0%
Minnehaha	Brandon Valley Intermediate	327	96.6%	96.0%	3.1%
Minnehaha	Childrens Home Society	11	100.0%	100.0%	0.0%
Minnehaha	Dell Rapids Middle School	56	98.2%	98.2%	1.8%
Minnehaha	Edison Middle School	343	95.6%	95.9%	2.6%
Minnehaha	Garretson Middle School	39	100.0%	100.0%	0.0%
Minnehaha	George McGovern Middle School	307	98.4%	98.0%	<1.0%

County	School Name	Students	1-Tdap	1-Men	Exempt
Total for South Dakota 6th Grade		11568	95.9%	95.7%	1.9%
Minnehaha	Harrisburg North Middle School	197	93.9%	94.4%	3.0%
Minnehaha	JDC	0	0.0%	0.0%	0.0%
Minnehaha	LifeScape Children's Specialty School	<10	85.7%	85.7%	14.3%
Minnehaha	Memorial Middle School	456	97.8%	97.6%	2.0%
Minnehaha	Patrick Henry Middle School	353	98.0%	97.7%	2.3%
Minnehaha	Tri-Valley Elementary	76	96.1%	96.1%	2.6%
Minnehaha	West Central Middle School	108	99.1%	99.1%	0.0%
Minnehaha	Whittier Middle School	340	98.8%	98.8%	0.9%
Minnehaha	Christ the King Elementary	13	100.0%	100.0%	0.0%
Minnehaha	Holy Spirit Elementary	40	97.5%	97.5%	0.0%
Minnehaha	McCrossan Boys Ranch Middle School	<10	100.0%	100.0%	0.0%
Minnehaha	Sioux Falls Christian Middle School	91	90.1%	87.9%	12.1%
Minnehaha	Sioux Falls Lutheran Elementary	<10	87.5%	100.0%	0.0%
Minnehaha	St. Katharine Drexel Elementary	12	100.0%	100.0%	0.0%
Minnehaha	St. Lambert Elementary	22	100.0%	100.0%	0.0%
Minnehaha	St. Mary Elementary	50	98.0%	98.0%	0.0%
Minnehaha	St. Mary's Elementary	15	100.0%	93.3%	6.7%
Minnehaha	St. Michael Elementary	29	100.0%	100.0%	0.0%
Minnehaha County	Total County	2952	97.2%	97.1%	2.1%
Moody	Colman Elementary	21	100.0%	100.0%	0.0%
Moody	Flandreau Middle School	57	100.0%	100.0%	0.0%
Moody	Pleasant Valley Colony Elementary	<10	100.0%	0.0%	100.0%
Moody County	Total County	82	100.0%	95.1%	4.9%
Oglala Lakota	Our Lady of Lourdes Elementary	15	100.0%	100.0%	0.0%
Oglala Lakota	Red Cloud Elementary	24	100.0%	100.0%	0.0%
Oglala Lakota	Batesland School	18	33.3%	38.9%	0.0%
Oglala Lakota	Little Wound Middle School	50	100.0%	100.0%	0.0%
Oglala Lakota	Pine Ridge Elementary	43	95.3%	97.7%	0.0%
Oglala Lakota	Porcupine Elementary	18	61.1%	61.1%	0.0%
Oglala Lakota	Red Shirt School	11	100.0%	90.9%	0.0%
Oglala Lakota	Wolf Creek School	58	98.3%	98.3%	1.7%
Oglala Lakota	Wounded Knee Elementary	13	84.6%	84.6%	0.0%
Oglala Lakota	Isna Wica Owayawa (Loneman School)-no report				
Oglala Lakota County	Total County	250	90.4%	90.8%	40.0%
Pennington	Black Hills Childrens Home	<10	80.0%	80.0%	20.0%
Pennington	Douglas Middle School	242	96.7%	96.3%	2.5%
Pennington	East Middle School	219	95.0%	94.1%	3.2%
Pennington	Hill City Middle School	46	95.7%	95.7%	4.6%
Pennington	New Underwood Elementary	13	100.0%	100.0%	0.0%
Pennington	North Middle School	200	94.5%	93.5%	0.0%
Pennington	Rockyford School	37	100.0%	100.0%	0.0%
Pennington	South Middle School	241	99.2%	99.2%	0.8%
Pennington	South West Middle School	219	98.6%	98.6%	50.0%
Pennington	West Middle School	218	95.0%	95.0%	3.2%
Pennington	Black Hills Lutheran Schools	<10	100.0%	100.0%	0.0%
Pennington	Lakota Woglaka Wounspe	<10	100.0%	100.0%	0.0%
Pennington	Rapid City Christian Middle School	28	89.3%	89.3%	0.0%
Pennington	St. Paul's Elementary	<10	88.9%	88.9%	0.0%
Pennington	St. Thomas More Middle School	65	96.9%	96.9%	3.1%
Pennington County	Total County	1546	96.4%	96.1%	1.8%
Perkins	Bison Elementary	10	100.0%	100.0%	0.0%
Perkins	Lemmon Elementary	10	100.0%	100.0%	0.0%
Perkins County	Total County	20	100.0%	100.0%	0.0%
Potter	Gettysburg Elementary	20	100.0%	100.0%	0.0%
Potter	Hoven Elementary	12	91.7%	91.7%	0.0%
Potter County	Total County	32	96.9%	96.9%	0.0%
Roberts	Rosholt Elementary includes White Rock Colony	18	88.9%	88.9%	11.1%
Roberts	Sisseton Middle School	66	100.0%	98.5%	0.0%
Roberts	Summit Elementary	<10	87.5%	87.5%	0.0%
Roberts	Tiospa Zina Middle School	38	100.0%	100.0%	0.0%

County	School Name	Students	1-Tdap	1-Men	Exempt
	Total for South Dakota 6th Grade	11568	95.9%	95.7%	1.9%
Roberts	Wilmot Jr. High	16	68.8%	68.8%	0.0%
Roberts County	Total County	146	94.5%	93.8%	1.4%
Sanborn	Sanborn Central Middle School	16	93.8%	93.8%	0.0%
Sanborn	Upland Colony Elementary	<10	80.0%	80.0%	20.0%
Sanborn	Woonsocket Elementary	15	93.3%	86.7%	0.0%
Sanborn County	Total County	36	91.7%	88.9%	2.8%
Spink	Camrose Colony Elementary	<10	50.0%	50.0%	0.0%
Spink	Clark Colony Elementary	<10	100.0%	100.0%	0.0%
Spink	Doland Elementary	<10	100.0%	100.0%	0.0%
Spink	George S. Mickelson Alternative Elementary	<10	100.0%	100.0%	0.0%
Spink	Glendale Colony Elementary	<10	50.0%	50.0%	0.0%
Spink	Hillside Colony Elementary	<10	100.0%	100.0%	0.0%
Spink	Northwestern Middle School	18	94.4%	83.3%	11.1%
Spink	Redfield Elementary	61	100.0%	100.0%	0.0%
Spink	Spink Colony Elementary	<10	100.0%	100.0%	0.0%
Spink County	Total County	98	95.9%	93.9%	2.0%
Stanley	Stanley County Middle School	29	93.1%	93.1%	0.0%
Stanley County	Total County	29	93.1%	93.1%	0.0%
Sully	Onida Elementary	18	100.0%	94.4%	0.0%
Sully County	Total County	18	100.0%	94.4%	0.0%
Todd	He Dog Elementary	13	92.3%	92.3%	0.0%
Todd	Klein Elementary	<10	100.0%	100.0%	0.0%
Todd	Lakeview Elementary	<10	100.0%	100.0%	0.0%
Todd	Littleburg Elementary	<10	100.0%	100.0%	0.0%
Todd	O'Kreek Elementary	<10	100.0%	100.0%	0.0%
Todd	Spring Creek Elementary	<10	100.0%	100.0%	0.0%
Todd	St. Francis Elementary	45	88.9%	84.4%	0.0%
Todd	Todd County Middle School	125	99.2%	99.2%	80.0%
Todd	Sapa Un Catholic Academy Elementary	<10	100.0%	100.0%	0.0%
Todd	White Eagle Elementary	0	0.0%	0.0%	0.0%
Todd County	Total County	203	96.6%	95.6%	50.0%
Tripp	Colome Middle School	17	88.2%	94.1%	0.0%
Tripp	Winner Middle School	51	98.0%	98.0%	2.0%
Tripp	Wood Elementary	0	0.0%	0.0%	0.0%
Tripp County	Total County	68	95.6%	97.1%	1.5%
Turner	Cameron Colony Elementary	<10	83.3%	100.0%	0.0%
Turner	Centerville Elementary	17	88.2%	88.2%	0.0%
Turner	Marion Middle School	12	100.0%	91.7%	0.0%
Turner	Parker Elementary	38	100.0%	100.0%	2.6%
Turner	Viborg-Hurley Middle School	21	100.0%	100.0%	0.0%
Turner County	Total County	94	96.8%	96.8%	1.1%
Union	Alcester-Hudson Elementary	19	94.7%	89.5%	0.0%
Union	Beresford Middle School	60	95.0%	96.7%	1.7%
Union	Dakota Valley Middle School	102	96.1%	95.1%	2.9%
Union	Elk Point-Jefferson Middle School	52	100.0%	100.0%	0.0%
Union County	Total County	233	96.6%	96.1%	1.7%
Walworth	Mobridge Middle School	46	100.0%	100.0%	0.0%
Walworth	Selby Elementary	14	100.0%	100.0%	0.0%
Walworth County	Total County	60	100.0%	100.0%	0.0%
Yankton	Gayville-Volin Elementary	18	100.0%	94.4%	5.6%
Yankton	Yankton Middle School	215	98.6%	98.6%	1.4%
Yankton	Sacred Heart Middle School	29	96.6%	96.6%	3.4%
Yankton County	Total County	262	98.5%	98.1%	1.9%
Ziebach	Dupree Elementary	40	85.0%	85.0%	0.0%
Ziebach	Takini Elementary	14	100.0%	100.0%	0.0%
Ziebach County	Total County	54	88.9%	88.9%	0.0%

*4-DTaP (Diphtheria-Tetanus-Pertussis x4); 4-Polio, 2-MMR (Measles-Mumps-Rubella x2); 2-VAR (Varicella x2) ; 3-HBV(Hepatitis B x3); 2-HAV (Hepatitis A x2); 1-Tdap (Tetanus-Diphtheria-Pertussis); 1-Men (Meningococcal MCV4 x 1); Exempt (medical and religious exemptions).

**For schools with kindergarten and 6th grade classes of less than 10 students, the number has been redacted to <10.

South Dakota Codified Law 13-28-7.1. Immunizations required for admission to school or early childhood program--Exceptions--Rules. Any child entering school or an early childhood program in this state, shall, prior to admission, be required to present to the appropriate school authorities certification from a licensed physician that the child has received or is in the process of receiving adequate immunization against polio-myelitis, diphtheria, pertussis, rubeola, rubella, mumps, tetanus, meningitis, and varicella, according to recommendations provided by the Department of Health. The Department of Health may modify or delete any of the required immunizations. As an alternative to the requirement for a physician certification, the child may present: (1) Certification from a licensed physician stating the physical condition of the child would be such that immunization would endanger the life or health; or (2) A written statement signed by one parent or guardian that the child is an adherent to a religious doctrine whose teachings are opposed to such immunization. The Department of Health may promulgate reasonable rules, pursuant to chapter 1-26, to require compliance and documentation of adequate immunization, to define appropriate certification, and to specify standard procedure.

Source: SL 1971, ch 141; SL 1972, ch 97; SL 1978, ch 114; SL 1992, ch 129; SL 2000, ch 83, § 1; SL 2005, ch 101, § 1; SL 2016, ch 90, § 1.

http://www.sdlegislature.gov/statutes/Codified_laws/DisplayStatute.aspx?Statute=13-28-7.1&Type=Statute



Epidemiological Profile of Carbapenem-resistant *Enterobacteriaceae* (CRE) — South Dakota, 2013-2016



2013-2016 CRE Epidemiological Profile authors
Angela, Jackley, RN; Nato Tarkhashvili, M.D., Kipp Stahl, BSN, RN

Healthcare-Associated Infections & Antimicrobial Resistance Program

Office of Disease Prevention Services

South Dakota Department of Health

<http://doh.sd.gov/diseases/hai/>



SUMMARY

Background

CRE, which stands for Carbapenem-resistant *Enterobacteriaceae*, are a family of germs that are difficult to treat because they have high levels of resistance to carbapenems. CRE are an important emerging threat to public health due to limited treatment options for patients infected with them.

Carbapenem resistance among *Enterobacteriaceae* can be due to several different mechanisms. Some CRE possess a β -lactamase [e.g., AmpC or extended spectrum β -lactamase (ESBL)] which, when combined with porin mutations, can render an organism nonsusceptible to carbapenems. Some CRE possess a carbapenemase (carbapenemase-producing CRE or CP- CRE) that directly breaks down carbapenems. Carbapenemases are often contained on mobile genetic elements that facilitate the transfer of resistance among *Enterobacteriaceae* and other gram-negative organisms. CP-CRE were first identified in the United States from an isolate collected in 1996 and have disseminated widely since that time. Much of the increase in CRE since 2000 has been due to the spread of CRE that produce the carbapenemase *Klebsiella pneumoniae* Carbapenemase (KPC). In addition to KPC, several other types of carbapenemases have been identified in the United States since 2009.

Until recently carbapenems have been successfully used for the treatment of infections caused by *Enterobacteriaceae*, including those producing extended-spectrum beta-lactamases.

However, carbapenemases confer resistance to broad-spectrum antibiotics, usually including carbapenems, and therefore, the majority of carbapenemase-producing *Enterobacteriaceae* are carbapenem resistant (CRE)¹. According to recent data from the Centers for Disease Control and Prevention in the United States, the percentage of CRE increased from 1.2% in 2001 to 4.2% in 2011². The highest increase in proportion, from 1.6% to 10.4%, was observed for *Klebsiella spp.* during the same period³.

In studies evaluating risk factors for CRE acquisition or infection, exposure to health care and antimicrobials are among the most prominent risks³. Invasive infections with carbapenem-resistant *K. pneumoniae* (CRKP)—likely primarily KPC-producers—were independently associated with recent organ or stem-cell transplantation, receipt of mechanical ventilation, exposure to antimicrobials, and longer length of stay when compared with patients with carbapenem-susceptible *K. pneumoniae* (CSKP)³. Other risk factors associated with the acquisition of CRKP include poor functional status, intensive care unit (ICU) stay, and use of several classes of antimicrobials including carbapenems, cephalosporins, fluoroquinolones, and vancomycin³.

In 2013 South Dakota experienced an outbreak of CRE in the northeast region of the state. This outbreak prompted the South Dakota Department of Health (SD DOH) to initiate activities to limit the spread and development of CRE. Those activities included:

- Adding CRE to the reportable diseases list. This activity allowed SD DOH to monitor CRE prevalence in the state and identify basic epidemiologic characteristics of CRE positive cases.
- Creating an electronic database of CRE positive cases with variables of interest.
- Initiating an antimicrobial stewardship program to lower pressure exercised by antibiotics to limit development of CRE and other multi-drug resistant organisms (MDROs) in a community.
- Developing close regional partnerships and providing communication and technical assistance to healthcare facilities on case management and screening protocols of patients.
- Training infection preventionists on appropriate care for patients with CRE.

The current epidemiologic profile is a summary of reported CRE cases to the SD DOH during 2013-2016. The report summarizes major characteristics of isolates as well as characteristics of infected/colonized patients in South Dakota. The intent of this document is to help South Dakota clinicians and public health professionals understand the epidemiology of CRE cases.

CRE Definition

During the reporting period two case definitions have been used:

1. Before 2015 the CDC CRE definition (nonsusceptible to imipenem, meropenem, or doripenem, AND resistant to all third-generation cephalosporins tested) was designed to be more specific for CP-CRE; however, it has proven to be complicated, difficult to implement, and has been found to miss some CP-CRE.
2. In January 2015, CDC modified the surveillance definition for CRE to the current definition (resistant to imipenem, meropenem, doripenem, or ertapenem OR documentation that the isolate possess a carbapenemase).

Problematic issues in CRE surveillance

Surveillance of CRE in South Dakota faced the following challenges during the reporting period:

- Differentiating colonized cases from infections and ascertaining the epidemiologic and public health importance of colonizations.
- Problematic and complicated case definitions with changing minimal inhibitory concentrations (MIC) limits that have not been adopted by all laboratories in the state.
- Varied screening protocols in affected facilities. No clear directions exist on the frequency and duration of screening as well as when to initiate screening.
- Communication between facilities and CRE case management.
- Duration of shedding organism and requirements of contact precautions for healthcare personnel handling CRE positive cases.

Results

The analysis covered 145 CRE cases reported to the SD DOH during 2013-2016 calendar years (cumulative incidence rate for 4 years: 16.9 per 100,000 population). Seventy five (52%) were female and the median age was 68 (range 0-95 years). American Indians (AIs) accounted for 28 (19%) cases while the majority, 114 (79%) were white. One hundred and fourteen patients (79%) had no previous CRE history indicated, while 31 (21%) had a previous history of CRE infection or colonization.

Eighty two specimens (57%) were obtained from hospitalized patients and 63 (43%) from non-hospitalized patients. The number of cases increased beginning in 2013. All reported cases were residents of SD.

Figure 1. Number of CRE cases reported to the SDDOH by year — South Dakota, 2013-2016

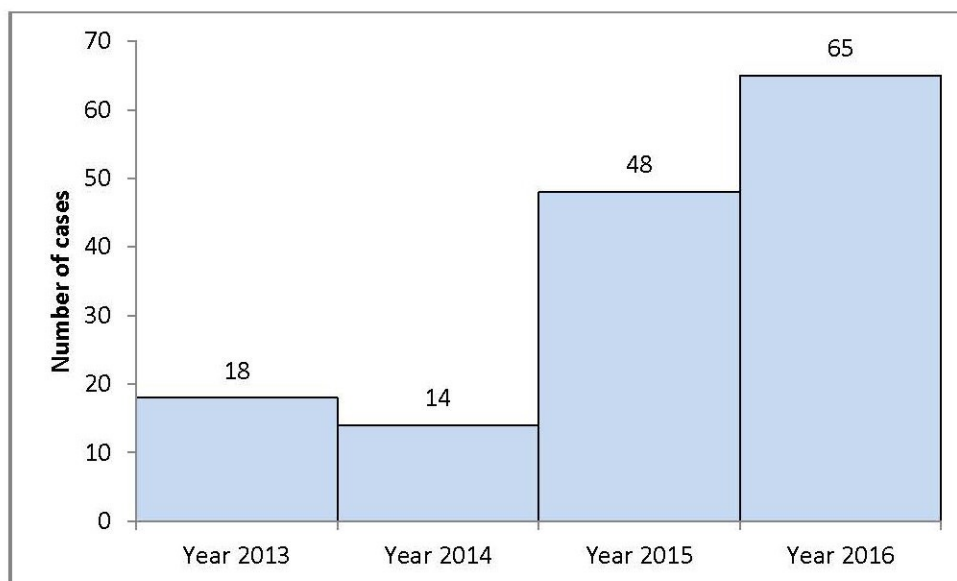
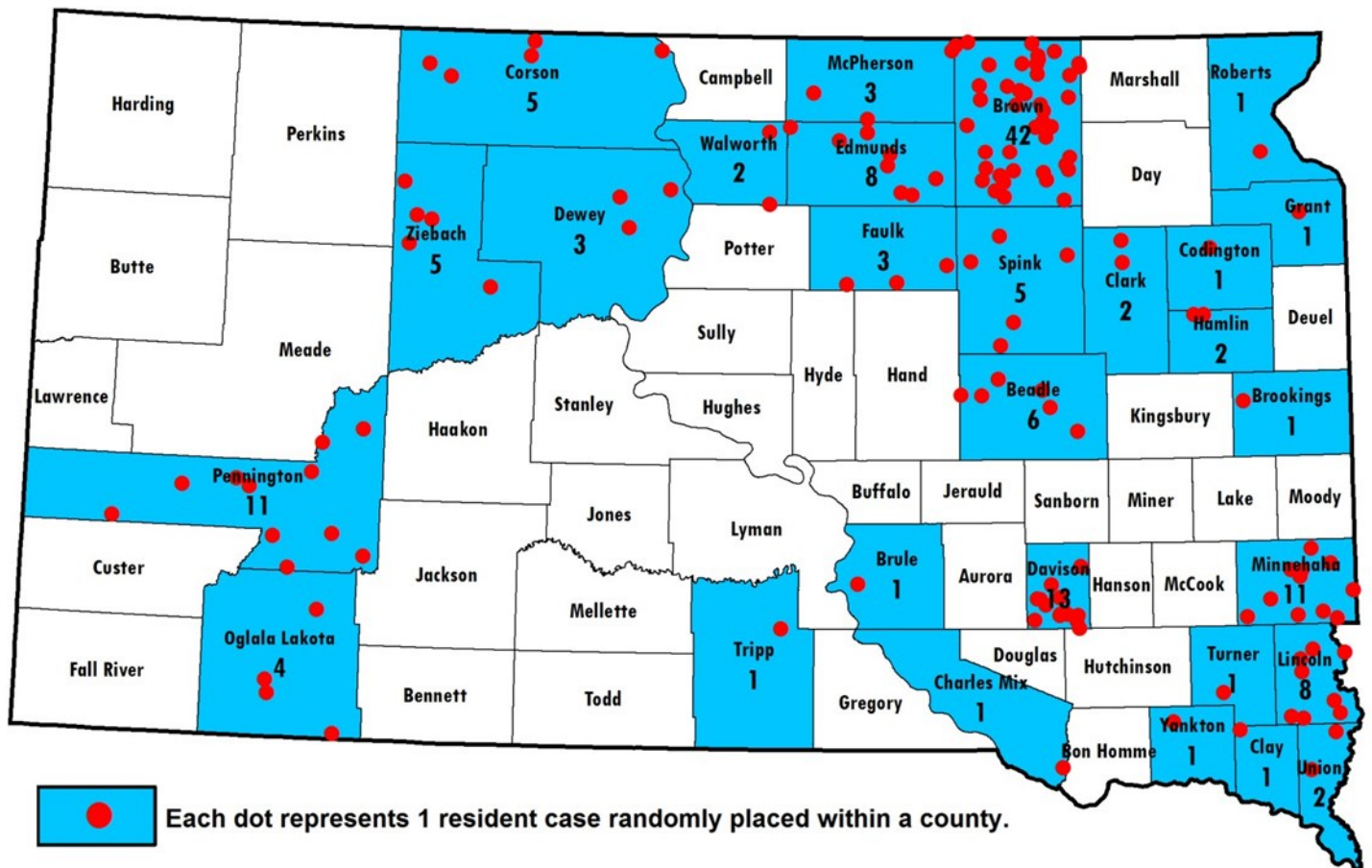
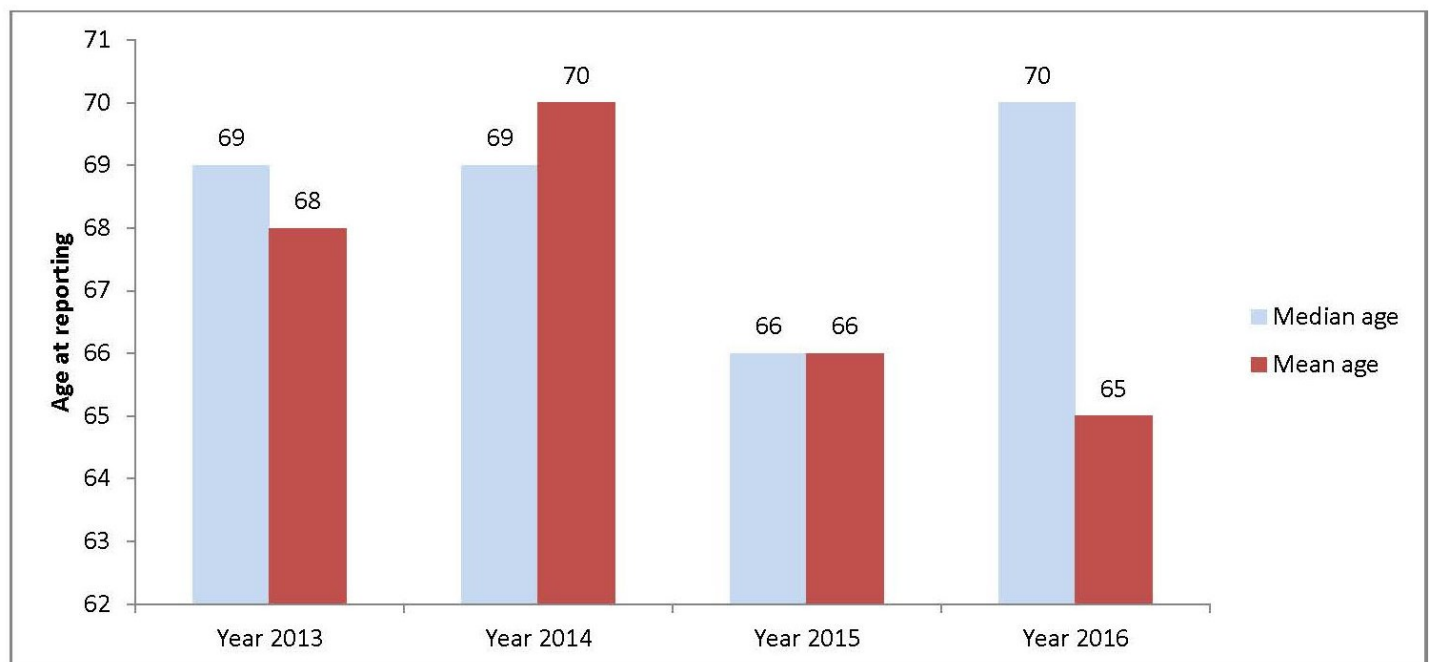


Figure 2. Cumulative number of reported CRE cases to SD DOH — South Dakota, 2013-2016



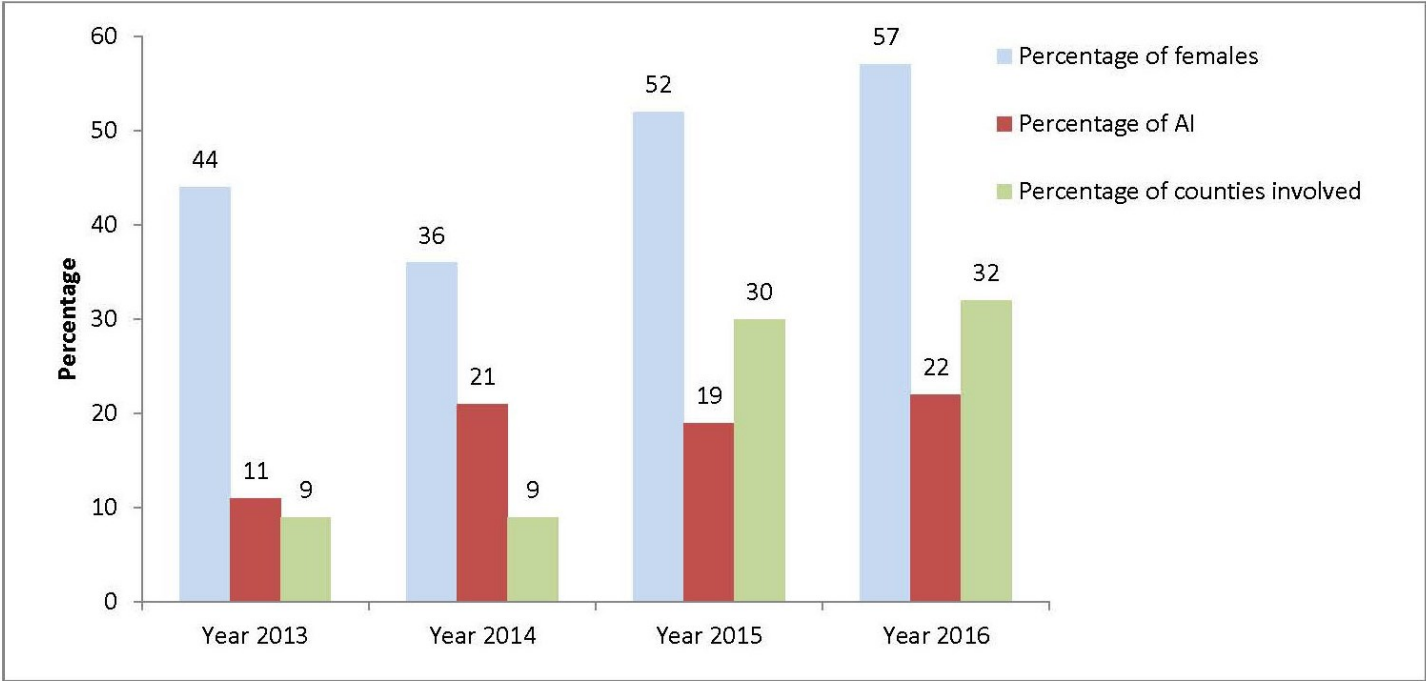
Cases were not stratified by age group because the median age of cases was 68 years. Rather, median and mean ages were presented by year. Figure 3 below indicates that in 2016 younger patients were identified as opposed to previous years (the difference between median and mean is 5 years). The mean age is affected by the influx of younger patients.

Figure 3. Patient's age at reporting by year — South Dakota, 2013-2016



Frequency of females, AIs and counties of residence became more uniform with years and closely reflected current South Dakota population characteristics. That might indicate increased prevalence of CRE affecting increasing number of all segments of South Dakota population.

Figure 4. Percentage of females, AIs, and counties involved based on the patient’s county of residence by year of reporting — South Dakota, 2013-2016



The majority of isolates were obtained at hospitals (57%) and clinics (23%). However long- term care facilities accounted for 8% and 12% of isolates respectively.

During 2013-2015 eighty cases of CRE were reported. Those cases came from two different sources: 1) Rectal swab (as part of a screening process) and 2) As a culture obtained from urine, wound, tissue, etc. The second segment of CRE positive cases were further stratified as “infections” (symptomatic patients) or “colonizations” (non-symptomatic patients). Overall, rectal swabs and colonizations (asymptomatic cases) made up 31% of total number (25 cases) and were later classified as “colonizations”, while symptomatic CRE cases accounted for 69% (55 cases) and were later classified as “CRE infections”.

This protocol has been modified in 2016. In 2016 a total of 65 cases have been reported. Those cases were classified as “colonizations” if they were coming from a rectal swab performed as part of the active screening process (7 cases, 11%) or “CRE cases”. The latter category included cases coming from all other sources regardless of their symptomatology (58 cases, 89%).

Initially South Dakota initiated screening of patients in an attempt to halt a regional outbreak. Later county incidence rate or outbreak in a county determined whether or not a facility introduced screening using predetermined screening criteria.

The most frequent site of CRE isolation among symptomatic patients was urine (62%) and sputum (13%). Site variations indicate the presence of CRE in other anatomical locations as well.

Table 1. Site of CRE isolation among infected (symptomatic) patients — South Dakota, 2013- 2016.

Site of a specimen collection	Frequency (%)
Blood	1 (1)
Non-surgical wound	7 (6)
Abdominal Cavity	2 (2)
Intra-abdominal abscess	1 (1)
Peritoneal fluid	1 (1)
Sputum	15 (13)
Surgical wound	10 (9)
Non-surgical wound	1 (1)
Tracheal/broncho-alveolar lavage	4 (4)
Urine	70 (62)
Gallbladder	1 (1)

Table 2. Site of CRE isolation among all patients — South Dakota, 2013-2016

Site of a specimen collection	Frequency (%)
Blood	1 (1)
Non-surgical wound	7 (5)
Other - Abdominal cavity	2 (1)
Other - intra-abdominal abscess	1 (1)
Rectal swab	19 (13)
Peritoneal fluid	1 (1)
Sputum	15 (10)
Surgical wound	10 (7)
Tissue (undetermined)	1 (1)
Tracheal/broncho-alveolar lavage	4 (3)
Urine	83 (57)
Gallbladder	1 (1)
Total	145

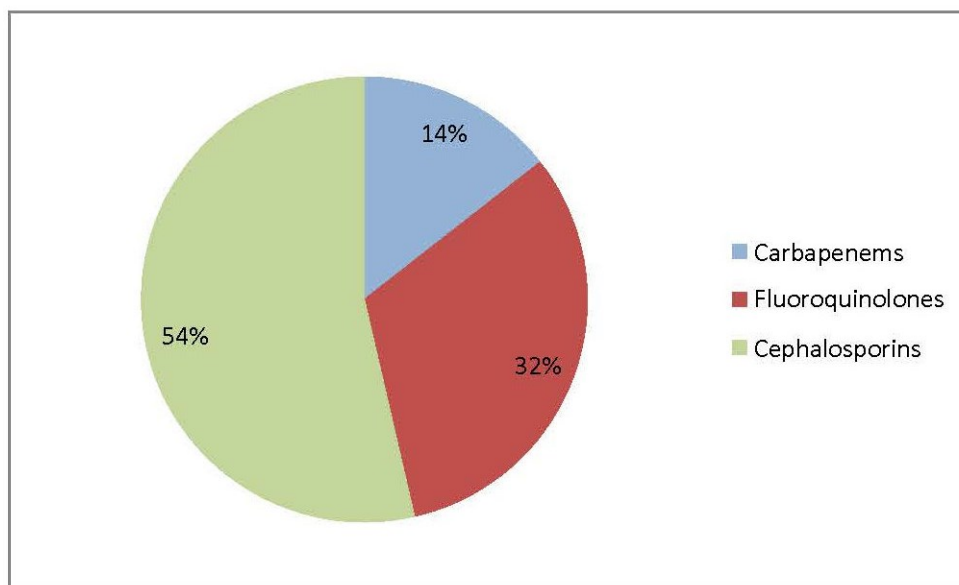
A history of receiving medical care outside of the U.S. within 6 months prior to diagnosis was known in 115 cases and all denied receiving medical care outside of the US. This finding underscores the fact that CRE in South Dakota is part of a US epidemic and not brought from elsewhere.

Among 119 patients whose previous medical history was known, 49 (41%) were hospitalized during the previous 12 months, 38 (32%) had a surgery, 18 (15%) had a history of an ICU stay, and 29 (24%) had a scope procedure (bronchoscopy, endoscopy, colonoscopy, cystoscopy) during the previous 12 months. The difference in those metrics was not statistically significant among different racial groups. The dataset does not include a reference group; therefore, it is problematic to draw conclusions based on cases only without taking into account a control population. However, consistent with the national profile, a high rate of medical procedures within a year prior to CRE diagnosis makes medical procedures and hospitalization a probable risk-factor of acquiring CRE. Another possibility could be the patient exposure to a long-term care facility. Sixty two patients (53%) reported a history of living in a long-term care facility within the preceding twelve months.

Among the patients that tested positive from urine (83 patients), 19 of those (23%) had an indwelling catheter at the time of specimen collection. Interestingly, among those patients where a specimen was obtained from other sites (62 cases), 15 (24%) patients had a urinary catheter in place, suggesting possible cross-contamination of other anatomical sites and a urinary catheter as a possible risk-factor for other locations.

Antibiotic exposure is one of the biggest risk-factors for creating multidrug-resistant organisms⁵. Seventy two patients (50%) reported exposure to cephalosporins, carbapenems, fluoroquinolones or combination of those three antibiotics three months prior to testing positive for CRE.

Figure 5. Exposure to commonly used broad spectrum antibiotics 3 months prior to testing positive for CRE — South Dakota, 2013-2016



Laboratory results

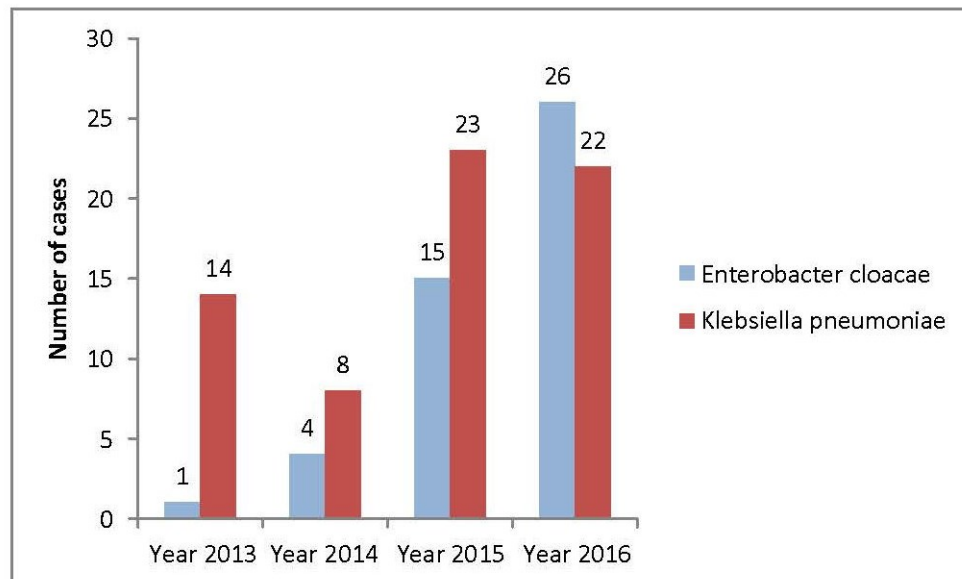
The most commonly cultured CRE was *Klebsiella pneumoniae* followed by *Enterobacter cloacae*.

Table 3. Genus and species of CRE isolates — South Dakota, 2013-2016

Genus and species	Number of isolates (%)
<i>Enterobacter aerogenes</i>	9 (6)
<i>Acinetobacter baumannii</i>	1 (1)
<i>Enterobacter cancerogenus</i>	1 (1)
<i>Enterobacter cloacae</i>	46 (32)
<i>Escherichia coli</i>	9 (6)
<i>Citrobacter freundii</i>	2 (1)
<i>Citrobacter koseri</i>	1 (1)
<i>Serratia marcescens</i>	3 (2)
<i>Proteus mirabilis</i>	1 (1)
<i>Klebsiella oxytoca</i>	1 (1)
<i>Klebsiella pneumoniae</i>	67 (46)
<i>Citrobacter spp</i>	1 (1)
<i>Citrobacter youngae</i>	1 (1)
Unknown	2 (1)
Total	145

The number of *Klebsiella pneumoniae* isolates was relatively stable across the years while the number of reported *Enterobacter cloacae* was dramatically increased.

Figure 6. Reported *Klebsiella pneumoniae* and *Enterobacter cloacae* cases by year of reporting South Dakota, 2013-2016



PCR test was used in 55 cases. Among those 47 (85%) were positive and 8 (15%) were negative.

Modified Hodge test was used in 55 cases. Among those 23 (42%) were positive and 32 (58%) were negative. Among all isolates tested (83 in total), 49 (59%) were carbapenemase producers and 34 (41%) non-producers. Among those that have been tested for carbapenemase, the highest rate (69%) of carbapenemase production was observed among *Klebsiella pneumoniae* strains (34 out of total 49 positive isolates).

History of having a MDRO in the past was available for 135 (93%) patients. Among those, 63 (47%) had a history of a previous MDRO infection. Among those 63 patients, 19 (35%) have tested positive for ESBL (Extended-spectrum beta-lactamases), 19 (35%) for MRSA (Methicillin-resistant *Staphylococcus aureus*), 9 (16%) for VRE (Vancomycin-resistant enterococci), and 8 (15%) for other MDROs cultured.

Limitations

The current report has several limitations:

- Information is unavailable on case-control studies that might uncover potential risk- factors of CRE in the state. High frequency of exposure to antibiotics, indwelling catheters, and common medical procedures warrants case-control studies in the future.
- Changes in case definition might create a problem in comparing the data across several years.
- Making CRE a reportable condition in 2013 may have created an artifact in surveillance, resulting in a higher number of cases reported.

Conclusions

- CRE is becoming more common and widespread. There are several indications of this statement based on the presented data:
 - The most frequent site of CRE isolation among symptomatic patients was urine (62%) and sputum (13%). However, a wide variety of sites indicates that CRE is no longer concentrated in specific locations.
 - A wide variety of isolated organisms indicates an involvement in multiple genus and species. However old reports describe *Enterobacter spp.* and *Klebsiella pneumoniae* as the only CREs isolated (in 1986-1990 and 2004 – 2008 respectively)⁶.
 - The number of affected counties is increased and the mean age of patients is decreased indicating that younger patients are acquiring CRE.
- Another explanation of the findings may be an artifact of the surveillance system. In 2013 SDDOH made CRE a reportable condition, allowing collection of data on cases that previously remained unknown. The new reporting requirement potentially increased the number of reported cases over time and increased variety of CRE presentations described above.

- American Indians were disproportionately affected. However potential risk factors such as hospitalizations during the previous year, ICU, surgeries, and scope procedures did not differ significantly between American Indians and whites.
- Sixty-three (47%) of patients had a history of MDRO other than CRE infection in the past and 72 (50%) reported exposure to commonly used broad-spectrum antibiotics. This highlight suggests a systemic problem of antibiotic overutilization and underscores the urgent need for antimicrobial stewardship programs statewide.
- High frequency of catheter use among patients alludes to catheters as a potential source of introduction and contamination of the environment with CRE.
- The absence of patients in the dataset reporting medical care outside of the U.S. indicates a domestic rather than imported problem in South Dakota.

References

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4. O'Horo J, Farrell A, Sohail M. Carbapenem-resistant Enterobacteriaceae and endoscopy: An evolving threat. *Am J Infect Control*. 2016 Sep 1;44(9):1032-6
5. Siegel JD; Rhinehart E; Jackson M; Chiarello L; Healthcare Infection Control Practices Advisory Committee. Management of Multidrug-Resistant Organisms In Healthcare Settings, 2006. 2006; <http://www.cdc.gov/hicpac/pdf/MDRO/MDROGuideline2006.pdf>
6. Gupta N, Limbago B, Patel J. et al. Carbapenem-Resistant Enterobacteriaceae: Epidemiology and Prevention. *Clin Infect Dis* 2011;53 (1 July). 60-67.



HPV and Cancer in South Dakota

By the South Dakota Cancer Registry, South Dakota Department of Health

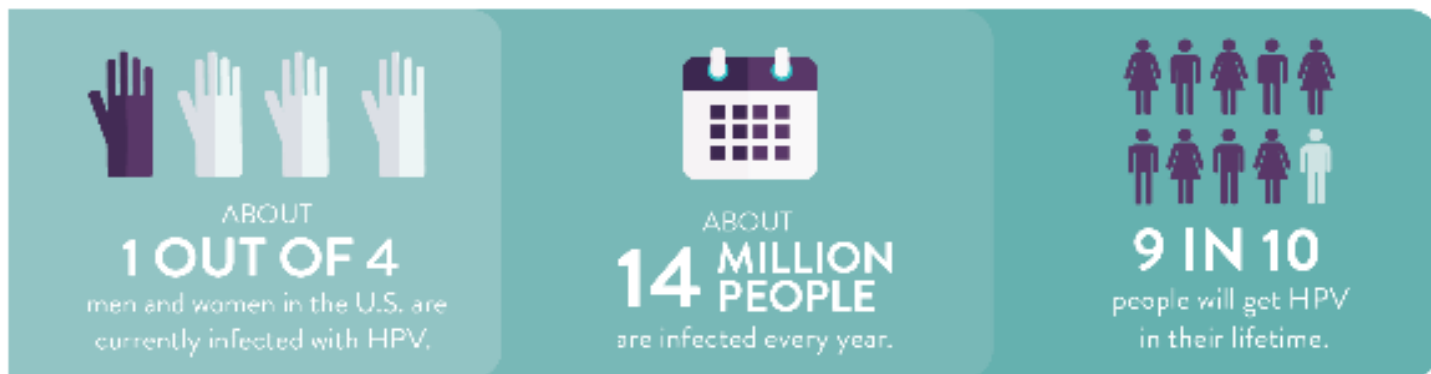
Human papillomavirus (HPV) is a very common virus; nearly 80 million people—about one in four—are currently infected in the United States. Most HPV infections (9 out of 10) go away by themselves within two years. But, sometimes, HPV infections will last longer, and can cause certain cancers and other diseases. HPV cancers include cancer of the cervix, vulva, vagina, penis, or anus. HPV infection can also cause cancer in the back of the throat, including the base of the tongue and tonsils. Every year in the United States, HPV causes 30,700 cancers in men and women. HPV vaccination can prevent most of these cancers, about 28,000, from occurring.¹

Gardasil-9 is the only HPV vaccine available in the United States. Gardasil-9 prevents infection with HPV types that are associated with many cancers, including: cervical, vaginal and vulvar cancers in females, anal and throat cancer in females and males, and penile cancer in males. In addition, HPV vaccine prevents infection with HPV types that cause genital warts in both females and males.²

Adolescent males and females age 11 or 12 years old should get two shots of HPV vaccine six to twelve months apart. Adolescents who receive their two shots less than five months apart will require a third dose of HPV vaccine. Teens and young adults who start the series at ages 15 through 26 years will need three doses of HPV vaccine to protect against cancer-causing HPV infections.¹

Gardasil-9 is available to eligible adolescents through the Vaccines for Children Program. To learn more about the VFC program visit: <https://doh.sd.gov/family/childhood/immunization/>.

HPV VACCINE IS CANCER PREVENTION



Incidence

More than 7.5% of all cancers diagnosed in South Dakota from 2001 to 2014 were in a primary site that may have been caused by HPV. According to CDC estimates, the following percentages of cancer are caused by HPV in the U.S.

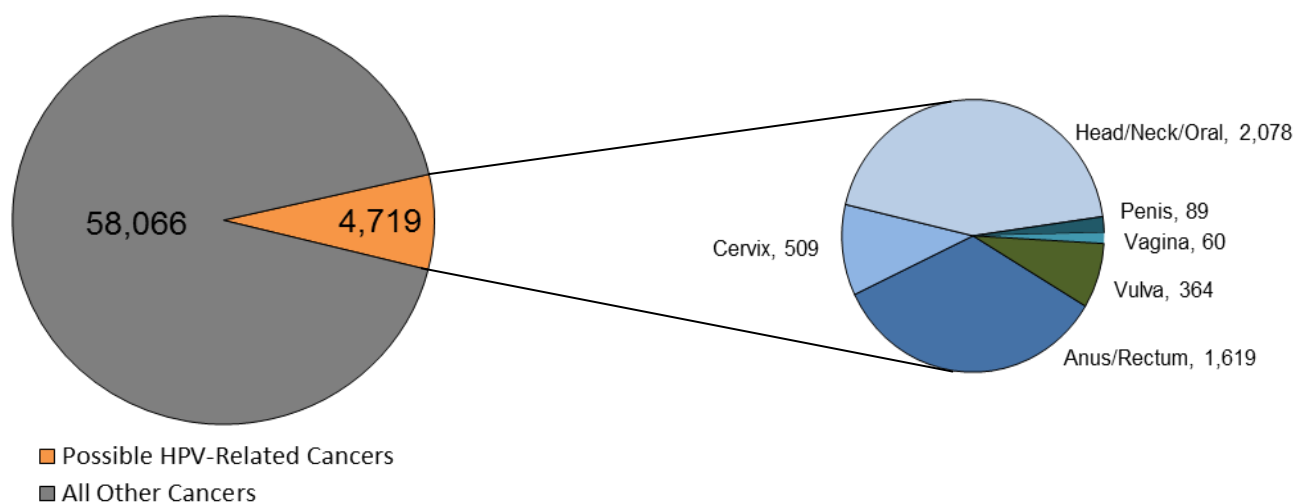
- | | | | |
|-------|----------------|-------|--------|
| • 91% | Anus/Rectum | • 63% | Penis |
| • 91% | Cervix | • 75% | Vagina |
| • 70% | Head/Neck/Oral | • 69% | Vulva |

Applying these same percentages to cancers diagnosed in South Dakota shows that if HPV were prevented then significant numbers of cancer diagnoses would be prevented.

¹<https://www.cdc.gov/hpv/parents/vaccine.html>

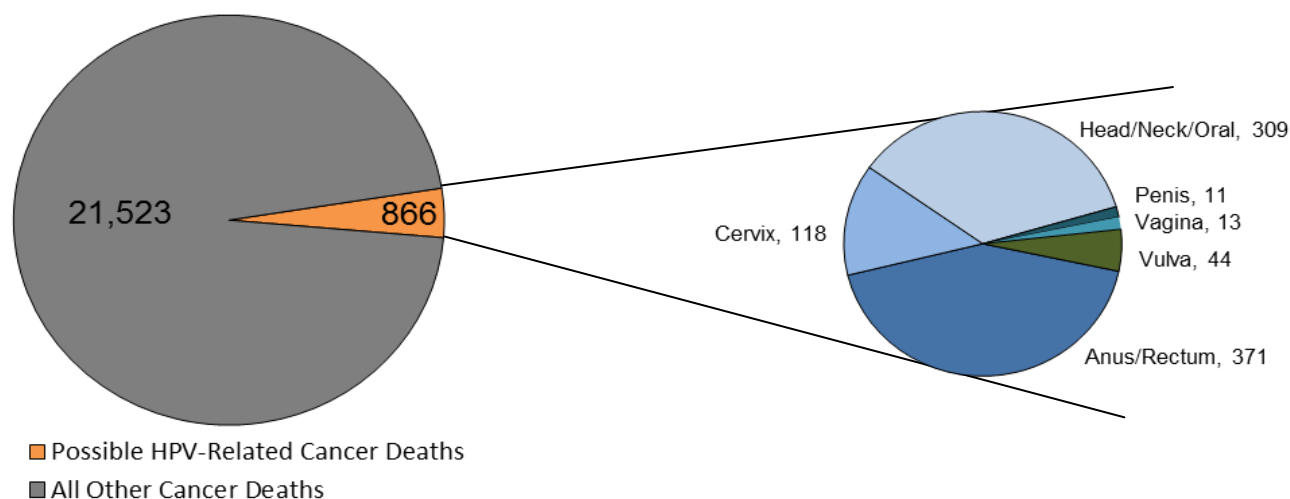
²<http://www.who.int/mediacentre/factsheets/fs380/en/>

Cancers Diagnosed in South Dakota, 2001-2014



Source: South Dakota Department of Health

Mortality Cancer Deaths in South Dakota, 2001-2014



Source: South Dakota Department of Health

Four percent of the total cancer deaths in South Dakota in 2001-2014 were from HPV-associated cancers. HPV vaccination saves lives in South Dakota. Get vaccinated today.

For additional information, please contact Kay Dosch, SD Cancer Registry Coordinator, at 605-773-6345 or 800-592-1861 or see the website at <http://getscreened.sd.gov/registry/> for the entire HPV and cancer monograph.

South Dakota Strategic Plan 2015-2020—Access to Preventive Care

Increase the percent of South Dakota adults who have visited a doctor for a routine check-up within the past 2 years from 80.1% in 2014 to 90% by 2020

South Dakota Percent	South Dakota 2020 Target	U.S. Percent
81.7% (2015)	90%	82.8% (2014)

Significance:

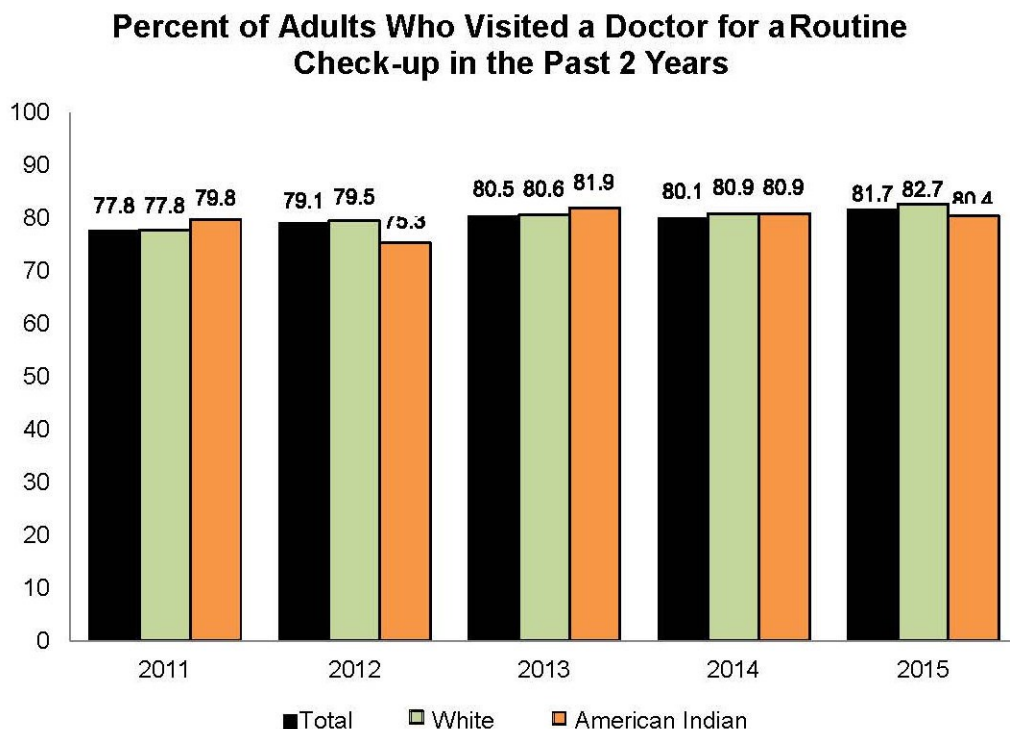
Regular health exams and tests can help find problems before they start. They may also help identify problems early, when the chances for treatment and cure are better. By receiving the right health services, screenings, and treatments, individuals are taking steps that improve their chances for living a longer, healthier life. Age, health, family history, life-style choices (i.e., diet, physical activity, smoking), and other important factors impact what and how often an individual needs healthcare.

A routine check-up is a good step to staying healthy and developing a relationship with a healthcare provider. It is important to have a regular healthcare provider who can recommend and encourage patients to receive preventive health screenings such as mammograms, clinical breast exams, colorectal cancer screening, and pap smears. Routine check-ups also help establish a line of communication and that in turn helps to build trust with the healthcare providers who are typically the gatekeepers to healthcare services for their patients.

Definition: Percent of adults who visited a doctor for a routine check-up in the past 2 years

Data Source: Behavioral Risk Factor Surveillance System (BRFSS)

Statistical Trend



Date Last Updated: 10/13/2016

For more information see the Department of Health's strategic plan website at <http://doh.sd.gov/strategicplan/>.

South Dakota Department of Health – Infectious Disease Surveillance

Selected Morbidity Report, 1 January – 30 April 2017

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

	Disease	2017 year-to-date	5-year median	Percent change
Vaccine-Preventable Diseases	Diphtheria	0	0	n/a
	Tetanus	0	0	n/a
	Pertussis	1	6	-83%
	Poliomyelitis	0	0	n/a
	Measles	0	0	n/a
	Mumps	0	0	n/a
	Rubella	0	0	n/a
	<i>Haemophilus influenza</i> (invasive) all types	8	0	n/a
Sexually Transmitted Infections and Blood-borne Diseases	HIV infection	15	9	+67%
	Hepatitis B, acute	0	0	0%
	Chlamydia	1485	1403	+6%
	Gonorrhea	372	281	+32%
	Syphilis, early	19	12	+58%
Tuberculosis	Tuberculosis	8	4	+100%
Invasive Bacterial Disease	Meningococcal, invasive	0	0	0%
	Strep. Pneumo., invasive	24	19	+26%
Enteric Diseases	<i>E. coli</i> , Shiga toxin-producing	16	10	+60%
	Campylobacteriosis	82	54	+52%
	Salmonellosis	57	55	+4%
	Shigellosis	5	7	-29%
	Giardiasis	30	31	-3%
	Cryptosporidiosis	33	31	+6%
	Hepatitis A	0	0	n/a
Vector-borne Diseases	Animal Rabies	7	9	-22%
	Tularemia	0	0	n/a
	Rocky Mountain Spotted Fever	1	0	0%
	Malaria (imported)	1	0	n/a
	Hantavirus Pulmonary Syndrome	0	0	0%
	Lyme disease	0	0	0%
	West Nile Virus disease	0	0	0%
Other Diseases	Legionellosis	3	30	90%
	Zika	0	0	n/a
	Additional reports include: Chicken Pox (8); Coccidioidomycosis (3); CRE (17); Hep B, chronic (20); Hep C (194); MRSA, invasive (39); Q fever (1); Vibriosis (3).			

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".