SOUTH DAKOTA DEPARTMENT OF HEALTH

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Sexually Transmitted Disease Update: Tantalizing Tidbits on Statistics, Testing, and Treatment

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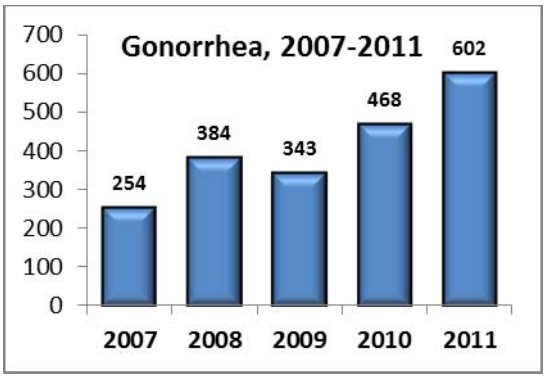
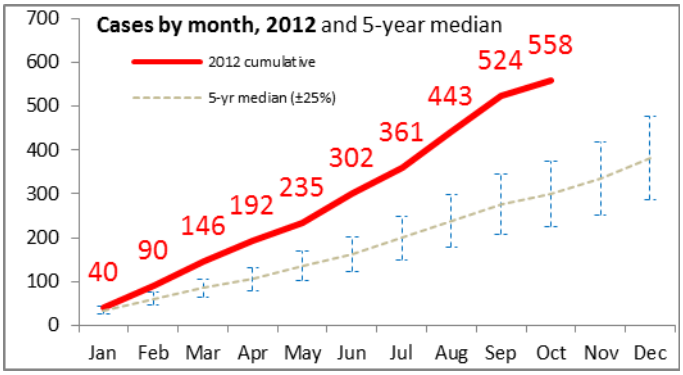
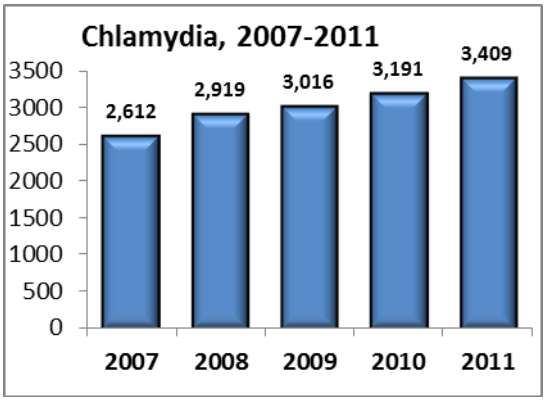
STD's in Your Community

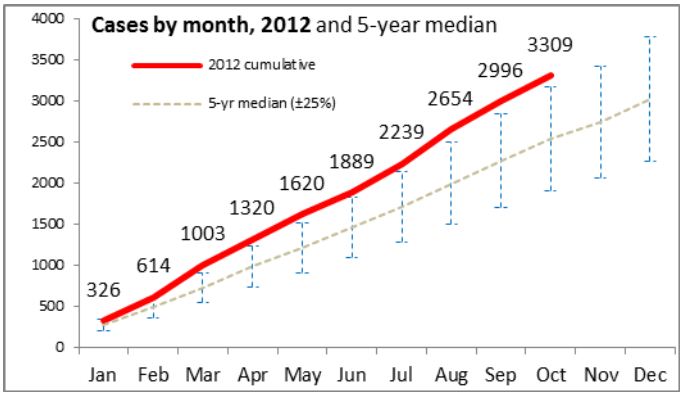
As 2012 comes to an end, we are nearing 600 confirmed cases of gonorrhea, and 3,400 cases of chlamydia. It has also been a banner year for syphilis, with 17 confirmed (primary, secondary, or early latent) cases. With chlamydia and gonorrhea being the most commonly reported STD's in South Dakota, there's a good chance that they are lurking somewhere in your community. Approximately 92% of South Dakota counties have reported at least one case of chlamydia so far this year. Gonorrhea is less common, with approximately 58% of South Dakota counties reporting at least one case of gonorrhea. Syphilis is a different story, as only three South Dakota counties share the 17 reported cases of early stage Syphilis.

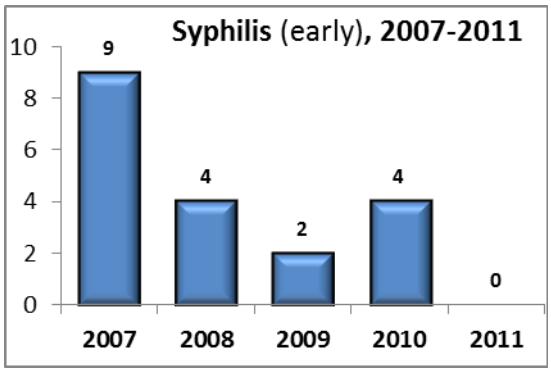
Below are provisional STD numbers through October 2012. The full Monthly Infectious Disease report, including other reportable diseases, can be seen at http://doh.sd.gov/ID/site.aspx.

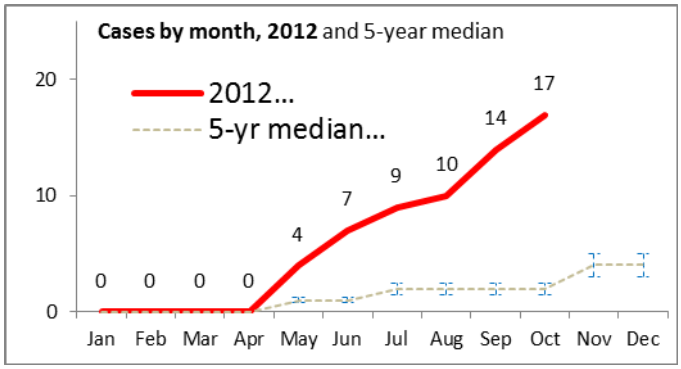












STD Testing

Are you asking your patients about their sexual health on a routine basis? STD testing is not only for those who are getting their yearly exam, or who are on birth control, or who are getting prenatal care, or for the very few that directly request a test. The only surefire way to assess a person's STD risk is to ask them some hard questions or to politely suggest the need for testing:

- When was the last time you had unprotected sex?
- Who are you having or who have you had sex with – men, women, or both?
- What kind of sex did you have – vaginal, oral, or anal?
    - Asking about site of sexual exposure is important as STD's can be found anally and orally. If a person has been having unprotected anal and oral sex, you may want to consider doing a test at those sites as well. Urine, urethral, or cervical tests will not pick up an infection that is anal or oral in nature. Gonorrhea particularly loves "oral," a great place for it to co-mingle with other organisms. The New Yorker recently published an article titled "Sex and the Superbug" in October that focused on gonorrhea infections and how oral infections play an important role in transmission.
- When was the last time you were tested for STD's/HIV?
- Have you noticed any discharge, odor, or burning with urination?
- When was the last time you noticed a sore on your vagina, penis, anus, or mouth?
- When was the last time you had a rash on your hands and feet, or a patchy body rash?
- Tell me a little about your sex partners.
- I noticed that it's been a while since your last STD/HIV test, it may be a good idea to go ahead and get that done today.
- Since I'm your doctor and I want to assure that you are healthy all around, I think it is a good idea to get an STD/HIV test.

Here are a few basic guidelines that may help when determining if a person needs STD testing:

- Sexually active persons engaging in unprotected sex, particularly persons with a new partner or multiple partners with in the last 60 days
- Persons with STD like symptoms
- It's also acceptable practice to presumptively treat individuals with a history of exposure to an STD or HIV

STD Treatment

For all of your STD treatment needs, from chlamydia to warts, you should be following the Centers for Disease Control and Prevention's 2010 STD treatment guidelines. The guidelines even offer information on Expedited Partner Therapy, which is the fast and easy treatment of sex partners. You can find information on this type of partner management on Page 7 in the guidelines (http://www.cdc.gov/std/treatment/).

Chlamydia treatment has remained steady for some years.

The **recommended regimen** is as follows:

Azithromycin 1 g orally in a single dose

OR

Doxycycline 100 mg orally twice a day for 7 days

A test of cure is no longer recommended for persons diagnosed with chlamydia, but it is recommended that they be re-tested 3-4 months after they have been treated, as re-infection is common.

Gonorrhea treatment updates were released in August of this year, recommending the Ceftriaxone (Rocephin) injection over the oral Cefixime (Suprax) treatment. These changes are due to the antibiotic resistance that is being discovered, and is a preemptive effort to thwart the spread of the gonorrhea "Super Bug". If at any time you suspect a case of resistant fonorrhea or treatment failure, notify the South Dakota Department of Health STD Program at 605-773-4794 for further instructions on patient follow up.

Recommended Regimen
for uncomplicated gonococcal infections of the cervix, urethra, and rectum

Ceftriaxone 250 mg in a single intramuscular dose

PLUS

Azithromycin 1 g orally in a single dose
or Doxycycline 100 mg orally twice daily for 7 days

At this time, a test of cure for persons treated with this regimen is not recommended, but it is recommended that they be re-tested 3-4 months after they have been treated, as re-infection is common.

Alternative Regimen
for uncomplicated gonococcal infections of the cervix, urethra, and rectum

If Ceftriaxone is not available:
Cefixime 400 mg in a single oral dose

PLUS

Azithromycin 1 g orally in a single dose
or Doxycycline 100 mg orally twice daily for 7 days

PLUS

Test-of-cure in 1 week

If the patient has severe Cephalosporin allergy:
Azithromycin 2 g in a single oral dose

PLUS

Test-of-cure in 1 week

To read the full MMWR regarding the updated gonorrhea treatment recommendations or to reference the 2010 STD treatment guidelines, visit the CDC STD Treatment website http://www.cdc.gov/std/treatment/.

Before and After Smoke-free Law in South Dakota: Hospitalizations for Cardiac, Cerebrovascular and Respiratory Diseases in 2009 and 2011

Improved health is one of the most important benefits of reducing exposure to tobacco smoke.[1] Recent studies show reduced risk of heart disease, stroke and respiratory diseases when smoke-free laws are implemented.[2,3] In 2010 South Dakotans voted to strengthen the state's indoor air law and prohibit smoking in all public places and workplaces, including bars and restaurants (South Dakota Codified Law 34-46).

To assess the public health impact of the smoking law we compared the number of South Dakota residents hospitalized for cardiac, cerebrovascular and respiratory diseases during the year before the law's enactment, 2009, with the same hospitalizations during the year following the enactment, 2011. The table below details the numbers of discharges of state residents from South Dakota hospitals for the various disease subcategories. These data were collected from hospitals by the South Dakota Association of Healthcare Organizations (SDAHO) and analyzed by the South Dakota Department of Health.

Hospitalizations for cardiac, cerebrovascular and respiratory diseases in 2009 and 2011, South Dakota

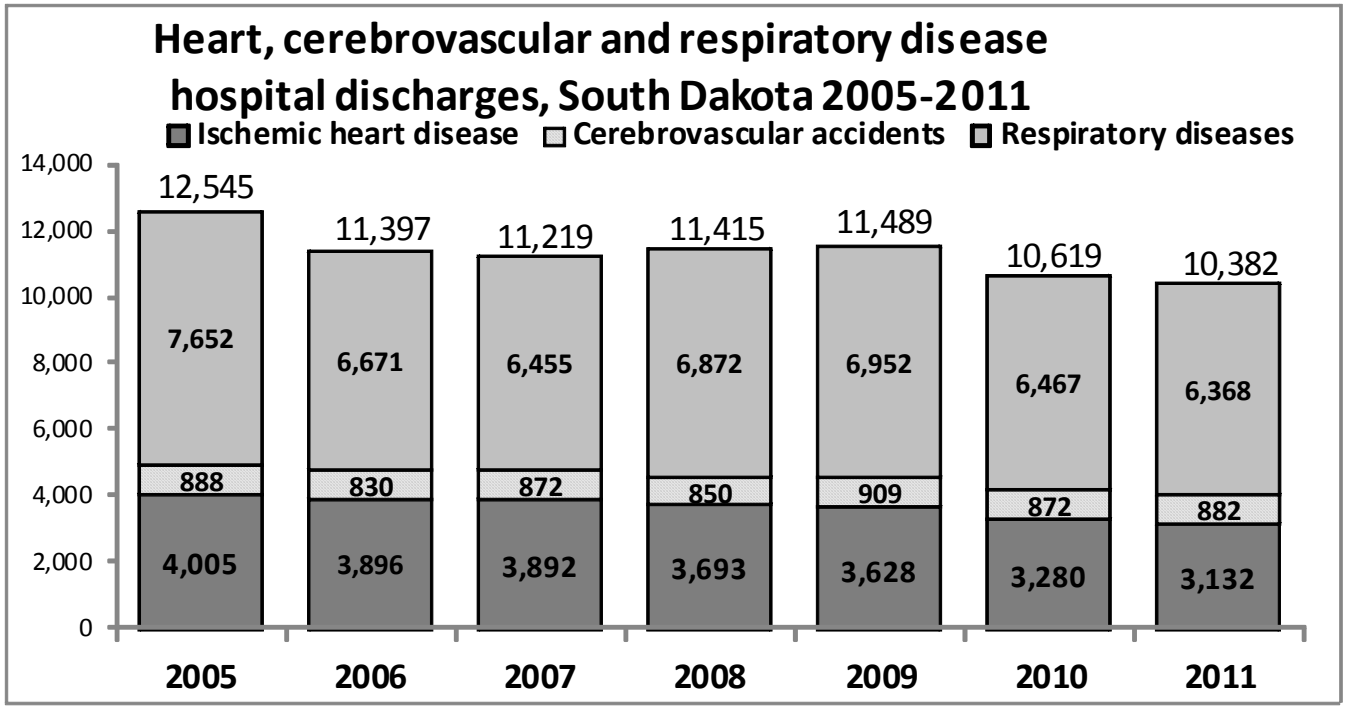
Diagnosis (ICD-9 code)	2009	Percent of total admissions	2011	Percent of total admissions	Difference	Percent change
Ischemic heart disease (410-414)	**3,628**	**3.7%**	**3,132**	**3.3%**	**-496**	**-13.7%**
Acute myocardial infarction (410)	1,518	**1.6%**	1,404	**1.5%**	-114	-7.5%
Angina pectoris (413)	53	**0.1%**	44	**<0.1%**	-9	-17.0%
Other forms of chronic ischemic heart	1,961	**2.0%**	1,593	**1.7%**	-368	-18.8%
Cerebrovascular accidents	**909**	**0.9%**	**882**	**0.9%**	**-27**	**-3.0%**
Intracerebral hemorrhage (431)	126	**0.1%**	113	**0.1%**	-13	-10.3%
Stroke ischemic (434.91)	783	**0.8%**	769	**0.8%**	-14	-1.8%
Respiratory diseases	**6,952**	**7.2%**	**6,368**	**6.7%**	**-584**	**-8.4%**
COPD and allied conditions (490-496)	2,253	**2.3%**	2,079	**2.2%**	-174	-7.7%
Asthma (493)	623	**0.6%**	584	**0.6%**	-39	-6.3%
Pneumonias (480-486)	4,595	**4.7%**	4,194	**4.4%**	-401	-8.7%
Spontaneous pneumothorax (512.0; 512.8)	104	**0.1%**	95	**0.1%**	-9	-8.7%
Total heart, cerebrovascular, respiratory	**11,489**	**11.8%**	**10,382**	**11.0%**	**-1,107**	**-9.6%**
Total hospital discharges	**97,130**		**94,397**		**-2,733**	**-2.8%**

During 2009 there were 11,489 hospitalizations due to selected cardiac, cerebrovascular and respiratory diseases; whereas during 2011 there were 10,382 hospitalizations for the same conditions. This was 1,107 fewer hospitalizations, or a 9.6% decrease from 2009 to 2011, the years before and after enactment of the smoke-free law. Ischemic heart disease decreased by 13.7%, respiratory diseases decreased 8.4%, and cerebrovascular accidents decreased 3.0%. Acute myocardial infarction, a subcategory of ischemic heart disease, decreased 7.5%.

This decrease in hospitalizations represented a cost savings. According to SDAHO's PricePoint the average charge of hospitalization for acute myocardial infarction in 2011 in a South Dakota hospital was $22,368 (www.sdpricepoint.org). The reduction of 114 myocardial infarctions between 2009 and 2011 produced a savings of $2,550,000 for South Dakota residents. Likewise, the reduction in chronic obstructive pulmonary disease (COPD) hospitalizations resulted in a cost savings of $2,897,000.

The 2010 enactment of the smoke-free laws in South Dakota was associated with decreases in cardiac, cerebrovascular and respiratory disease hospitalizations. Although these reductions in hospitalizations do not conclusively prove cause and effect, the association is strong evidence supporting the improved health benefits of smoke-free laws.

The figure on the next page shows the numbers of hospitalizations of South Dakota residents for the selected cardiac, cerebrovascular and respiratory diseases for years 2005 through 2011.



Authors: Lon Kightlinger and Nato Tarkhashvili, South Dakota Department of Health

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1. Institute of Medicine. National Research Council. Secondhand Smoke Exposure and Cardiovascular Effects: Making Sense of the Evidence. Washington, DC: The National Academies Press, 2010.

2. Tan, CE and SA Glantz. Association between smoke-free legislation and hospitalizations for cardiac, cerebrovascular, and respiratory diseases: a meta-analysis. 2012. Circulation 126: 2177-2183.

3. Hurt, RD, SA Weston, JO Ebbert, SM McNallan, IT Croghan, DR Schroeder, and VL Roger. Myocardial infarction and sudden cardiac death in Olmsted County, Minnesota, before and after smoke-free workplace laws. Archives of Internal Medicine 29 Oct 2012: 1-7.

South Dakota Department of Health – Infectious Disease Surveillance

Selected Morbidity Report, 1 January – 31 October 2012

(provisional numbers) see http://doh.sd.gov/ID/site.aspx

	Disease	2012 year-to-date	5-year median	Percent change
Vaccine-Preventable Diseases	Diphtheria	0	0	n/a
	Tetanus	0	0	n/a
	Pertussis	60	43	+40%
	Poliomyelitis	0	0	n/a
	Measles	0	2	n/a
	Mumps	0	2	n/a
	Rubella	0	0	n/a
	Haemophilus influenza type b	0	0	n/a
Sexually Transmitted Infections and Blood-borne Diseases	HIV infection	24	20	+20%
	Hepatitis B, acute	1	1	n/a
	Chlamydia	3,309	2,533	+31%
	Gonorrhea	558	299	+87%
	Syphilis, early	17	2	+750%
Tuberculosis	Tuberculosis	16	14	+14%
Invasive Bacterial Diseases	Meningococcal, invasive	0	2	n/a
	Invasive Group A *Streptococcus*	0	0	n/a
Enteric Diseases	*E. coli*, Shiga toxin-producing	39	45	-13%
	Campylobacteriosis	249	271	-8%
	Salmonellosis	132	145	-9%
	Shigellosis	11	7	+57%
	Giardiasis	115	97	+19%
	Cryptosporidiosis	100	121	-17%%
	Hepatitis A	0	3	n/a
Vector-borne Diseases	Animal Rabies	54	29	+86%
	Tularemia	5	8	-38%
	Rocky Mountain Spotted Fever	1	2	-50%
	Malaria (imported)	5	1	+400%
	Hantavirus Pulmonary Syndrome	1	0	n/a
	Lyme disease	4	1	+300%
	West Nile Virus disease	202	21	+862%
Other Diseases	Legionellosis	6	2	+200%
	Streptococcus pneumoniae, invasive	68	-	n/a
	Additionally, the following were reported: Chicken Pox (29); Dengue Fever (1); Erlichiosis (1); Hepatitis B, chronic (26); MRSA, invasive (61); Q Fever (2)			

Communicable diseases are obligatorily reportable by physicians, hospitals, laboratories, and institutions. The **Reportable Diseases List** is found at http://doh.sd.gov/Disease/report.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".