

# PUBLIC HEALTH BULLETIN

#### **VOLUME 22 NUMBER 2**

**APRIL 2010** 

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#### ACIP recommends universal annual influenza vaccination

A panel of immunization experts has voted to expand the recommendation for annual influenza vaccination to include all people aged 6 months and older. The expanded recommendation will take effect in the 2010-2011 influenza season. The new recommendation seeks to remove barriers to influenza immunization and signals the importance of preventing influenza across the entire population.

The Advisory Committee on Immunization Practices (ACIP), which advises the Centers for Disease Control and Prevention on vaccine issues, voted on the new recommendation during its February 24, 2010, meeting in Atlanta. The vote took place against a backdrop of incremental increases in the numbers and groups of people recommended for influenza vaccination in years past, and lessons learned from the world's still-ongoing first flu pandemic in 40 years. Prior to the vote, ACIP recommendations for seasonal influenza vaccination – which focused on vaccination of higher risk persons, children 6 months through 18 years of age, and close contacts of higher risk persons – already applied to about 85 percent of the U.S. population.

Discussion at the ACIP meeting focused on the value of protecting all people 19 to 49 years of age, a group hard hit by the 2009 H1N1 pandemic virus, which is likely to continue circulating into next season and beyond. Additionally, many people in currently recommended "higher risk" groups are unaware of their risk factor or that they are recommended for vaccination. The ACIP discussion also recognized the practicality and value of issuing a simple and clear message regarding the importance of influenza vaccination in the hopes that this would remove impediments to vaccination and expand coverage. Finally, new data collected over the course of the 2009 H1N1 pandemic indicates that some people who do not currently have a specific recommendation for vaccination may also be at higher risk of serious flu-related complications, including those who are obese, post-partum women and people in certain racial/ethnic groups.

The provisional ACIP recommendation can be found on the web at <a href="http://www.cdc.gov/vaccines/recs/provisional/downloads/flu-vac-mar-2010-508.pdf">http://www.cdc.gov/vaccines/recs/provisional/downloads/flu-vac-mar-2010-508.pdf</a>

#### Rabies Surveillance, South Dakota, 2009

Rabies is an enzootic fatal viral disease and a serious public health concern in South Dakota. In 2009, 718 animals were tested for rabies with 53 animals testing positive. This is an increase of +121% from the previous year. The 53 rabid animals included 35 wild animals (31 skunks and 4 bats) and 18 domestic animals (7 dogs, 4 cats, 4 cattle, 2 horses and 1 goat). South Dakota's last human rabies case was in 1970.

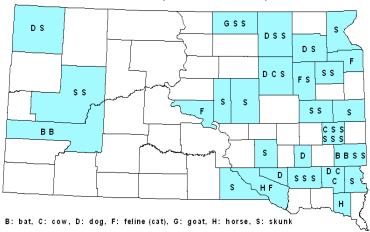
In 2009, 665 animals tested negative for rabies, including 227 cats, 152 dogs, 104 bats, 75 cattle, 27 raccoons, 26 skunks, 13 deer, 12 horses, 5 rats, 5 squirrels, 4 muskrats, 3 sheep, 3 goats, 2 ferrets, 2 opossums, 2 woodchucks, and 1 each fox, gopher and mouse.

During 2009 rabid animals were detected in 27 South Dakota counties (see map and table). Animals were submitted for testing from all counties except Campbell, Mellette, Sully and Ziebach.

During the 10-year period (2000-2009) 686 of 9,005 (8%) animals tested were positive for rabies. During these years animals were tested from all counties, and rabid animals were detected in all counties except Bennett, Shannon, Todd, and Ziebach. The most animals were submitted for testing from Minnehaha County and Ziebach submitted the fewest.

Since 2000, 27% of rabies cases in South Dakota have been domestic animals. There were 40 rabid dogs and 40 rabid cats, many of which were unvaccinated strays. In 2009 the 7 rabid dogs were the most since 2003. Rabid

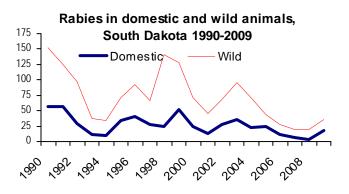
#### Animal rabies, South Dakota, 2009



Animals tested and confirmed rabies cases, SD, 2000-2009					
	2009		2000 - 2009		
	Total		Total		
Animal	Pos	tested	Pos	tested	% Pos
Skunk	31	57	436	682	64%
Cattle	4	79	74	973	8%
Bat	4	108	60	2027	3%
Dog	7	159	40	1642	2%
Cat	4	231	40	2491	2%
Horse	2	14	29	264	11%
Goat	1	4	4	23	17%
Woodchuck	0	2	1	23	4%
Fox	0	1	1	35	3%
Raccoon	0	27	1	388	<1%
Deer, elk, donkey, lla	0	13	0	78	0%
Rodents*	0	7	0	71	0%
Squirrel, chipmunk	0	5	0	82	0%
Muskrat	0	4	0	32	0%
Sheep	0	3	0	58	0%
Opossum	0	2	0	36	0%
Weasel, ferret, mink	0	2	0	30	0%
Pig	0	0	0	6	0%
Badger	0	0	0	4	0%
Bison	0	0	0	5	0%
Shrew, mole	0	0	0	3	0%
Coyote, wolf	0	0	0	28	0%
Rabbit, hare	0	0	0	13	0%
Bobcat, bear	0	0	0	1	0%
Mountain lion	0	0	0	3	0%
Other animals	0	0	0	7	0%
TOTAL	53	718	686	9005	8%
*Rodents: rat, mouse, prairie dog, gopher, ground squirrel, beaver, porcupine, vole					

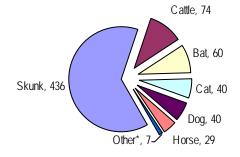
livestock since 2000 included 74 cattle, 29 horses and 4 goats.

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_	20			000-200	
County	Pos	Neg	Pos	Neg	%Pos
Aurora Beadle	1 0	2 12	7 16	40 123	15% 12%
Bennett	0	12	0	123 5	0%
BonHomme	0	2	9	40	18%
Brookings	1	27	40	400	9%
Brown	3	19	46	293	14%
Brule	0	8	9	68	12%
Buffalo	0	1	1	6	14%
Butte	0	8	8	157	5%
Campbell	0	0	4	12	25%
CharlesMix	2	16	23	142	14%
Clark	2	13	19	78	20%
Clay	1	10	8	75	10%
Codington	2	23	13	206	6%
Corson	0	3	1	7	13%
Custer	0	1	3	29	9%
Davison	0	23	17	243	7%
Day	2	19	26	87	23%
Deuel	0	6	13	111	10%
Dewey	0	3	2	16	11%
Douglas	1	4	5	34	13%
Edmunds	0	7	6	52	10%
Fall River	0	5	2	86	2%
Faulk	0 1	4 5	7 9	35	17%
Grant	1	3	13	80 59	10% 18%
Gregory Haakon	0	3	3	25	11%
Hamlin	0	7	27	108	20%
Hand	1	7	7	51	12%
Hanson	1	í l	5	19	21%
Harding	2	3	4	15	21%
Hughes	1	16	13	200	6%
Hutchinson	3	27	20	187	10%
Hyde	1	5	6	60	9%
Jackson	0	1	1	33	3%
Jerauld	0	2	5	30	14%
Jones	0	3	1	9	10%
Kingsbury	2	6	23	128	15%
Lake	6 0	14	23	169 93	12% 4%
Lawrence Lincoln	1	12	4 5	93 146	4% 3%
Lyman	0	3	ა 1	36	3%
Marshall	0	2	13	64	17%
McCook	0	2	13 17	98	15%
McPherson	3	6	9	61	13%
Meade	2	15	9	129	7%
Mellette	0	0	1	5	17%
Miner	Ö	5	8	66	11%
Minnehaha	4	149	55	2,201	2%
Moody	0	10	16	96	14%
Pennington	2	44	13	783	2%
Perkins	0	3	1	16	6%
Potter	0	1	1	11	8%
Roberts	1	6	11	131	8%
Sanborn	0	6	13	42	24%
Shannon	0	3	0	38	0%
Spink	3	6	12	64	16%
Stanley	0	3	2	16	11%
Sully Todd	0 0	0 2	2 0	3 45	40% 0%
Tripp	0	8	12	45 81	13%
Turner	3	10	13	169	13% 7%
Union	0	12	5	79	6%
Walworth	0	20	13	226	5%
Yankton	Ö	13	5	101	5%
Ziebach	0	0	0	1	0%
South Dakota	53	665	686	8,319	8%



The common skunk (*Mephitis mephitis*) is the enzootic rabies reservoir in South Dakota. Since 2000, 64% of skunks tested have been rabid. Bat rabies is also enzootic in South Dakota with 60 of 2,027 (3%) bats testing positive over the past 10 years.

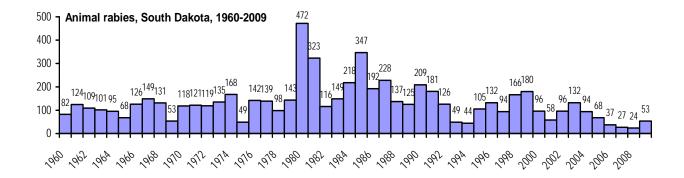
#### Rabid animals, South Dakota 2000-2009



<sup>\*</sup>Others include goat 4, fox 1, raccoon 1, woodchuck 1.

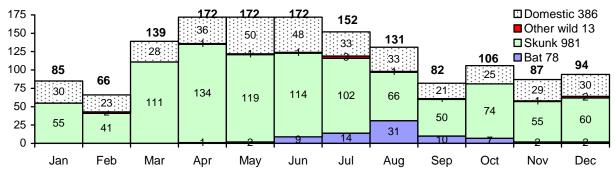
Although rabies is not enzootic in other wild animals in South Dakota, since 2000 rabies has been detected in 1 fox, 1 raccoon, and 1 woodchuck. These other wild animals are likely spillover rabies following exposure to rabid skunks. During 2009 there were 13 deer tested for rabies, the most tested since at least 1990. All deer tested since 1990 in South Dakota have been negative, but nationally 6 deer were rabid in 2008 alone.

During the past 50 years, since 1960, animal rabies has been reported every year in South Dakota (see figure below). The most cases were reported in 1980 with 472 rabid animals and the least were reported in 2008 with 24 rabid animals.

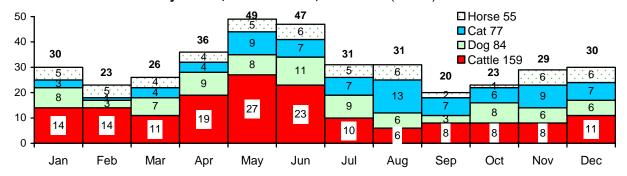


Rabid animal events occur throughout the year in South Dakota, but most rabies events occur during the spring (see figures below). During the years 1993-2009, skunk rabies cases peaked in April and bat rabies peaked in August. Among domestic animals cattle rabies peaked in May, dog rabies in June and cat rabies peaked in August. Other domestic animals not included in the figure include 6 rabid sheep, 4 goats and 1 pig with rabies, all occurring during the months March to October.

#### Animal rabies by month, South Dakota, 1993-2009 (n=1,458)



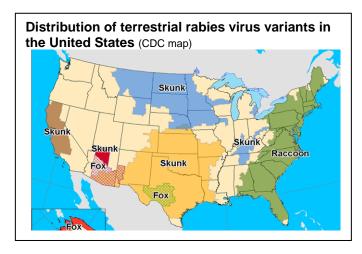
#### Pet and livestock rabies by month, South Dakota, 1993-2009 (n=375)



Nationally from 2000 through 2008, there were 27 human rabies cases, including 26 deaths and 1 survival. Nineteen of the human cases (70%) were associated with bat-rabies virus, 6 (22%) had dog rabies virus (all foreign imports) and 1 each raccoon and fox exposure. These 27 human rabies cases were from Arkansas, California (7), Florida, Georgia, Indiana, Iowa, Minnesota (2), Mississippi, Missouri, New York, Oklahoma, Puerto Rico, Tennessee, Texas (4), Virginia and Wisconsin (2).

The most recent national animal rabies surveillance data reported are for 2008 (Blanton, et. al., 2009). Nationally, there was a 3% decrease from the previous year with 6,841 cases of animal rabies reported (93% wild and 7% domestic animals) in 2008. Nationally, rabid domestic animals included 294 cats, 75 dogs, 59 cattle, 30 horses/mules, 12 goats/sheep, and 1 llama.

Nationally, wild animals testing positive for rabies included 2,389 raccoons, 1,806 bats, 1,589 skunks, 454 foxes, 31 groundhogs, 22 bobcats, 20 coyotes, 42 mongooses, 6 deer, 4 opossums, 3 rabbits and 1 each coati, cougar, otter and beaver.



Two laboratories provide rabies tests in South Dakota: (1) the Animal Disease Research Diagnostic Laboratory (ADRDL) in Brookings, and (2) the State Public Health Laboratory (SDPHL) in Pierre. Both laboratories use the direct fluorescent antibody (DFA) technique. The case definition of a confirmed animal rabies case is a positive DFA test, performed preferably on central nervous system tissue, or isolation of the rabies virus in cell culture or in a laboratory animal. Human serum rabies antibody titers on previously

vaccinated people may be ordered through SDPHL.

Rabies consultations are available from the Office of Disease Prevention, South Dakota Department of Health, 7 days a week. Consultations are based on current Centers for Disease Control and Prevention (CDC) recommendations\*. We strive to recommend appropriate rabies prevention measures and to minimize unnecessary and inappropriate post-exposure testing and prophylactic treatment.

Rabies is a viral infection that affects the nervous system of mammals. Rabies is usually transmitted by a bite from an infected animal, scratch or exposure to saliva. After being bitten or scratched, symptoms usually start 3 - 8 weeks later. Symptoms may include behavior changes, headache, fever, malaise, sensory changes, and paralysis. Rabies is almost always fatal. Prompt vaccination following a bite prevents rabies in humans. Up-to-date vaccinations of dogs, cats, ferrets and livestock, prior to exposure, protects against the disease. *If a human is exposed to rabies they must have antirabies shots.* 

#### References and resources

\*CDC. Human rabies prevention – United States, 2008: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2008; 57 (RR-3). www.cdc.gov/mmwr/preview/mmwrhtml/rr5703a1.htm

CDC. Compendium of animal rabies prevention and control, 2008: National Association of State Public Health Veterinarians. MMWR 2008; 57 (RR-2). www.cdc.gov/mmwr/preview/mmwrhtml/rr5702a1.htm

CDC. Compendium of measures to prevent disease associated with animals in public settings, 2009: National Association of State Public Health Veterinarians. MMWR 2009; 58 (RR-5). <a href="http://www.cdc.gov/mmwr/pdf/rr/rr5805.pdf">http://www.cdc.gov/mmwr/pdf/rr/rr5805.pdf</a>

Blanton, JD, K Robertson, D Palmer and CE Rupprecht. 2009. Rabies surveillance in the United States during 2008. Journal of the American Veterinary Medical Association 235: 676-689.

http://avmajournals.avma.org/doi/pdf/10.2460/javma.235.6.676

### Addresses, telephone numbers and web sites

**Department of Health** (rabies consultations)

615 East Fourth Street Pierre, SD 57501-1700

Phone: 1-800-592-1861 or 605-773-3737; after hours 605-280-4810

http://doh.sd.gov/DiseaseFacts/Rabies.aspx

#### **Department of Health, Public Health Laboratory** (rabies testing)

615 East Fourth Street Pierre, SD 57501-1700

Phone: 1-800-592-1861 or 605-773-3368

http://doh.sd.gov/Lab/rabies.aspx
CDC Rabies: www.cdc.gov/rabies

#### Animal Disease Research and Diagnostic Laboratory (rabies testing)

Box 2175, North Campus Drive South Dakota State University Brookings, SD 57007-1396 Phone: 605-688-5171 http://vetsci.sdstate.edu

#### **SD Animal Industry Board**

(livestock and other animal veterinary and regulatory issues) 441 S. Fort Street, Pierre, SD 57501

Phone: 605-773-3321

http://aib.sd.gov

#### **South Dakota Bat Working Group**

http://sdbwg.org

#### 2008 National Animal Rabies

State Cases
Alabama 84
Alaska 15
Arizona 182
Arkansas 49
California 179
Colorado 65
Connecticut 202
Delaware 21

Dist Columbia 49 Florida 151 Georgia 389

Hawaii 0 Idaho 10

Illinois 103 Indiana 13

lowa 27 Kansas 67

Kentucky 46 Louisiana 6

Maine 65

Maryland 420 Massachusetts 154

Michigan 79 Minnesota 70

Mississippi 7 Missouri 66 Montana 14

Nebraska 43 Nevada 16

New Hampshire 59

New Jersey 285 New Mexico 25 New York 515

North Carolina 474 North Dakota 34

Ohio 64 Oklahoma 43

Oregon 13 Pennsylvania 431

Rhode Island 34 South Carolina 166 South Dakota 24

Tennessee 128

Texas 1022 Utah 14

Vermont 75

Virginia 622

Washington 17 West Virginia 96 Wisconsin 24

Wyoming 28 Puerto Rico 58 TOTAL 6843

#### Two rabies laboratories in South Dakota: Brookings and Pierre

Pierre: Submission of specimens to the South Dakota Public Health Laboratory for Rabies Testing 615 East Fourth Street, Pierre, SD 57501-1700

- 1. Call the South Dakota Department of Health to report the possible exposure and to seek guidance in how to submit the animal for testing. Call 800-592-1861 or 605-773-3737 during regular business hours. For emergencies, after hours, on weekends or holidays, call the mobile phone (605-280-4810). Staff will be able to answer questions and concerns. If at all possible, please call before destroying the suspect animal.
- 2. Call one of the above numbers to make special arrangements for shipping an animal specimen after regular business hours, on weekends or holidays.
- 3. Notify the South Dakota Public Health Laboratory (SDPHL) of all impending shipments of animal specimens before actual transport. Call the lab at 800-592-1861 or 605-773-3368 during regular business hours. After hours, on weekends or holidays, contact an individual listed in #1.
- 4. Be careful not to destroy the head of the animal by gunshot or bludgeoning. Take the animal to a veterinarian for removal of the head in order to preserve the brain tissue and prevent unnecessary exposure to a diseased animal.
- 5. Include with the specimen, a SDPHL submission form with the following information:
  - Name and birth date of person exposed (or owner if pet exposure)
  - Type of animal and exposure, including exposure date/suspect animal death date
  - Symptoms and/or unusual behavior of suspect animal
  - Name and phone number of veterinarian or physician (Submission forms are available from veterinarians or physicians)
- 6. Wrap animal head carefully and either ship or deliver directly to the lab in an insulated container with ice or ice packs. SPECIMEN MUST NOT BE FROZEN. Transport the specimen by the quickest means possible.

Direct additional questions to SDPHL 605-773-3368.

http://doh.sd.gov/Lab/rabies.aspx

Brookings: Submission of rabies specimens to Animal Disease Research & Diagnostic Laboratory Box 2175, North Campus Drive, South Dakota State University, Brookings, SD 57007-1396

Source: South Dakota Animal Disease Research & Diagnostic Laboratory User's Guide (01.09.09), http://vetsci.sdstate.edu/userguide/ADRDL%20Users%20Guide%201.09.09.pdf

Animals suspected of having rabies that have exposed a human should be euthanized and tested as soon as possible, and staff at the ADRDL is qualified to perform the needed rabies FA test. Since the FA test is so quick and reliable, after hours testing is rarely required anymore; however, ANY AFTER HOURS, WEEKEND OR HOLIDAY EMERGENCY RABIES TEST should be directed to the South Dakota Public Health Laboratory, 615 East 4th St, Pierre, SD 57501.

#### HOW TO SUBMIT RABIES-SUSPECT CASES TO ADRDL

To meet CDC guidelines for rabies testing, the ENTIRE BRAIN WITH BRAINSTEM must be submitted FRESH to the laboratory. This will allow for testing of both sides of the brain and brainstem as per CDC guidelines. ADRDL staff will fix the brain from domestic animals and some wild animals in formalin for histopathology examination after rabies testing has been completed.

1. Package the brain in a sterile plastic bag placed inside a crush-proof container. Submit to the lab in an appropriate leak-proof, insulated shipping container with adequate ice packs to keep specimen chilled during shipping. DO NOT FREEZE the fresh brain.

- 2. As always, the laboratory WILL NOT ACCEPT LIVE ANIMALS for rabies testing. Whole bodies, complete heads, or removed brains are all acceptable specimens for submission. ADRDL staff will remove brains upon arrival, at no additional charge.
- 3. Fill out the standard ADRDL submission form with complete information, including the rabies section at the bottom. Clearly identify as a rabies suspect and clearly indicate if human exposure has occurred with the route of exposure and date included. A referring veterinarian must be listed on the form. The submission form can be downloaded from http://vetsci.sdstate.edu
- 4. Samples arriving to the laboratory before 12 PM (noon) will have results available the same day. Samples arriving after 12 PM (noon) will be tested the next business day.
- 5. Additional tests, if requested, will not be performed on a rabies suspect case until the rabies FA has been completed and is negative.
- 6. The ADRDL is open 8 AM to 5 PM Monday through Friday, excluding holidays. A SPECIMEN DROP-OFF COOLER is accessible to the public 24 hours a day, so samples can be delivered to the lab on nights or weekends and left in this cooler for testing the next business day. The cooler is adjacent to the loading dock on the east side of the building. The on-call diagnostician can be reached at (605)690-1576 if problems or questions arise.
- 7. Testing after hours, weekends or holidays IS NOT AVAILABLE at the ADRDL.

#### FEE POLICY

DOMESTIC ANIMALS - The fee is \$42 for South Dakota clients and \$48 for out-of-state clients. This fee includes not only the rabies FA test, but also routine histopathology and additional laboratory testing if requested or found necessary to determine the cause of the animal's death. A \$10 necropsy fee is added if a necropsy is requested for the purpose of further diagnostics. If needed, toxicology testing fees are extra.

WILD ANIMALS - Wild animals that originated in South Dakota and have caused a "significant risk to human health", will be accepted for rabies testing at NO CHARGE to the submitter. The South Dakota Game, Fish and Parks Department pays for the testing under these circumstances and only the rabies FA test is completed (no additional testing). Wild animals that have not caused a risk to human health can be submitted for rabies testing, but the submitter will be charged the same fee as for domestic animals. If adult bats are submitted with bat pups, only the adults will be tested.

HUMAN HEALTH RISK DEFINITION - The exposure of a human or domestic animal to saliva from the suspect animal either through a bite, exposure of mucous membranes, exposure of an open wound, or scratches. OR The exposure of a human or domestic animal to central nervous system tissue from the suspect animal either through exposure of mucous membranes or exposure of an open wound.

#### RESULTS AND REPORTING

- 1. Laboratory results are reported by telephone as soon as they are available to the referring veterinary clinic listed on the submission form.
- 2. Test results are reported as "no test" when ANY part of the brain required for testing (per CDC guidelines) is missing for any reason (including autolysis, trauma and/or only half of brain submitted fresh) and the FA result is negative.
- 3. Test results are also reported as "no test" when brain tissue cannot be identified for any reason (most often due to marked autolysis and/or severe brain trauma) and the FA test is not performed.
- 4. In addition to the referring veterinary clinic, all POSITIVE rabies FA results from domesticated animals will also be reported to the State Health Department and Animal Industry Board in the state where the animal resided.
- 5. All POSITIVE rabies FA results from wild, non-domesticated animals will be reported to the State Health Department, the Animal Industry Board and Game, Fish and Parks Department in the state where the animal resided; additionally, the referring veterinary clinic (if one is listed) will also be notified.

#### **South Dakota Rabies Control Laws**

#### **RABIES CONTROL STATUE: Chapter 40-12 (Section 12-1, 2, 3, 4, 5, 6)**

- 40-12-1. Confinement of animals required in localities where rabies exists -- Neglect as misdemeanor. In localities where rabies exists, the animal industry board may require that any animal deemed likely to spread such disease shall be muzzled, caged, tied or confined in any manner that may be deemed necessary. It is a Class 1 misdemeanor for any owner or person in charge of any animal so ordered to be muzzled, caged, tied or confined, to refuse or neglect to carry out such order.
- 40-12-2. Destruction of rabid animal required. If the animal industry board determines that rabies exists in any animal, the board may kill such animal and any animal there is reason to believe has been bitten by any animal affected with rabies.
- 40-12-4. Definition of terms. Terms used in this chapter mean:
- (1) "Department," the department of health;
- (2) "Owner," any person who has a right of property in a pet, keeps or harbors a pet or who has it in his care or acts as its custodian, or permits a pet to remain on or about any premises occupied by him;
- (3) "Pet," any dog, cat or other species of carnivore kept for domestication or display.
- 40-12-5. Confinement of pet after attack upon person -- Violation as misdemeanor. The department may serve written notice upon the owner of any dog or cat which has attacked or bitten a person to confine the animal at the owner's expense upon his premises or at a city pound or other place designated in the notice for a period of at least ten days after the animal has attacked or bitten any person. The department may examine the animal at any time within the ten-day period of confinement to determine whether such animal shows symptoms of rabies. In the case of any pet other than a dog or cat, which has attacked or bitten a person, the department may serve written notice upon the owner of such animal that the owner shall have the animal euthanized immediately and submit the brain to an approved laboratory for rabies examination. Any owner who fails to comply with a written notice served pursuant to this section is guilty of a Class 1 misdemeanor.
- 40-12-6. Confinement of pet bitten by animal suspected of having rabies -- Violation as misdemeanor. The department may serve written notice upon the owner of a dog or cat known to have been bitten by an animal known or suspected of being affected by rabies, requiring the owner to confine such dog or cat for a period of not less than six months. However, if such dog or cat had been properly treated with an antirabic vaccine, confinement shall be for a period of not less than three months. In the case of any pet other than a dog or cat, the department may serve written notice upon the owner of such animal that the owner shall have the animal euthanized immediately. Any owner who fails to comply with a written notice served pursuant to this section is guilty of a Class 1 misdemeanor.

SHERIFF: Chapter 7-12 (Section 7-12-29) Taking and holding animal suspected of being dangerous -- Formal determination -- Disposal of dangerous animal. The sheriff may take possession of any animal suspected of being dangerous. The sheriff may hold such animal until a formal determination can be made of the extent of the danger such animal poses. If the animal has attacked or bitten a human or an animal pet, the formal determination shall include consultation with the Department of Health for the purposes of rabies control. The sheriff may dispose of any animal so determined to be dangerous.

**REPORTABLE DISEASES:** Administrative Rule 44:20:01:03 Category I reportable diseases have a potential for epidemic spread or require rapid application of public health measures to prevent a serious threat to public health or safety. Category I reportable diseases include: Rabies, human and animal;

CONTROL MEASURES: Administrative Rule 44:20:03:10 Application of public health measures to animals. The department may instruct a person who owns or is in possession of an animal known or suspected to be a carrier of an infectious agent in public health measures for preventing infection and spread of disease. If the department knows or has reason to believe, because of testing or epidemiological information, that an animal is infected with an infectious agent and is a threat to the public health, it may issue a public health notice directing the person who owns or is in possession of the animal to take one or more of the following actions:

- (1) To examine or test the animal to determine whether it is infected with an infectious agent capable of causing human disease
- (2) To report to an authorized department representative for counseling on methods for preventing transmission of the infectious agent;
- (3) To confine or quarantine the animal for the duration of the incubation period or contagious period;
- (4) To destroy the animal or provide treatment until it is cured or free from the infection and to follow measures for preventing reinfection;
- (5) To cease from specific activities involving the infected animal that endanger the health of others;
- (6) To cooperate with the department in implementation of reasonable public health measures.

Health requirements for dogs and cats on exhibit: Administrative Rule 12:02:10:03 All dogs for exhibition must be accompanied by a health certificate signed by a licensed accredited veterinarian within 30 days before entry to the South Dakota State Fair. The health certificate shall indicate the dates of vaccination for rabies, canine distemper, and canine parvovirus. All vaccines must be current. All cats for exhibition must be accompanied by a health certificate signed by a licensed accredited veterinarian within 30 days before entry to the South Dakota State Fair. The health certificate shall indicate the dates of vaccination for rabies and feline distemper. All vaccines must be current.

Health certificate for imported cats and dogs: Administrative Rule 12:68:06:09 Any cat or dog imported into South Dakota must be accompanied by a health certificate as described in SDCL 40-14-2 issued by a state or federal government veterinary official of the originating state or by a licensed veterinarian. The certificate must state that the animal has not been exposed to rabies, that it is free from signs of any contagious or communicable disease, that it has been currently vaccinated by a licensed veterinarian, the date of vaccination, the type of vaccine used, and the date the animal is due for boostering for rabies immunization.

#### Colorectal Cancer in South Dakota, 2007

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

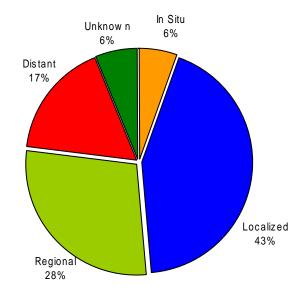
The South Dakota Cancer Registry has released the 2007 colorectal cancer data. For 2003-2007, the average number of new colorectal cancer cases per year is 441 and the average number of annual deaths due to colorectal cancer is 165.

Incidence 2007		Mortality 2007	
Number of cases		Number of deaths	
Total	444	Total	168
Males	222	Males	80
Females	222	Females	88
White	424	White	164
American Indian	18	American Indian	5
Median age at diagnosis	73 yrs	Median age at death	79 yrs
Mode	83 yrs	Mode	83 yrs
Age range at diagnosis	21-100 yrs	Age range at death 2	1-101 yrs
SD age-adjusted incidence rate	51.1	SD age-adjusted death rate	19.6
US SEER age-adjusted incidence rate	e (2006) *45.9	US SEER age-adjusted death rate (200	6) *17.1

Rates per 100,000 US 2000 standard population \* 2007 US SEER age-adjusted rates not available Source: South Dakota Department of Health

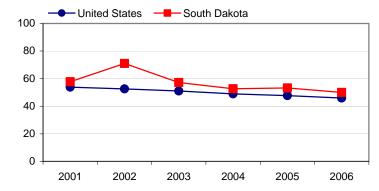
The graph at the right displays the SEER Summary Stage at diagnosis for 2007 colorectal cancer cases. As shown, almost half of the cases were diagnosed at the more advanced stages of regional and distant. Patient survival rates decline when diagnosed at a more advanced stage.

See below for the age-adjusted colorectal cancer incidence rates for the United States and South Dakota for 2001-2006. Except for 2002, South Dakota rates have been close to the national rates.



Source: South Dakota Department of Health

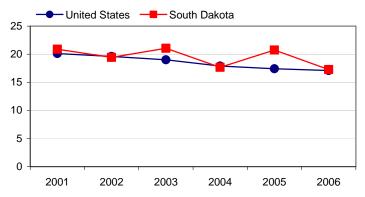
#### Colorectal Incidence Rates, US and SD



Sources: SEER and South Dakota Department of Health

The age-adjusted colorectal cancer mortality rates are shown below for the United States and South Dakota for 2001-2006.

#### **Colorectal Mortality Rates, US and SD**



Sources: SEER and South Dakota Department of Health

#### **Colorectal Cancer Screening Program in South Dakota**

To increase colorectal cancer screening, the South Dakota Department of Health will implement a new colorectal screening program June 1, 2010. While the program focus is to raise awareness for all, the program will provide direct colorectal screening services through participating medical providers for patients that qualify.

Colorectal Cancer Screen Program eligibility criteria are based on the following:

• Age: 50 and older

• Income: 200% of the Federal Poverty Guideline

• Insurance: Underinsured or uninsured for colorectal cancer screening

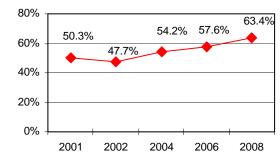
#### **BRFSS** Colorectal Cancer Screening Data

The recommendation for colorectal cancer screening is a blood stool test every year or a sigmoidoscopy/ colonoscopy every ten years for persons age 50 years of age or older. For Behavioral Risk Factor Surveillance System (BRFSS) data, see below for percentages of colorectal cancer screening in South Dakota.

South Dakotans 2008 Participation In Recommended Colorectal Cancer Screenings

Recommended Co	orectar Ca	ncer screenings
Participated		No Participation
in Screening		in Screening
Blood Stool Test Only	3.9%	
Sigmoidoscopy/ Colonoscopy Only	49.7%	
Both – Blood Stool Test <u>and</u> Sigmoidoscopy/ Colonoscopy	9.8%	
Total	63.4%	36.6%

South Dakotans 2001-2008 Participation In Recommended Colorectal Cancer Screenings



Source: Behavior Risk Factor Surveillance System

For additional information, please contact Kay Dosch, South Dakota Cancer Registry Coordinator, at 605-773-6345 or 800-592-1861 or see the website at <a href="http://doh.sd.gov/SDCR/">http://doh.sd.gov/SDCR/</a> for the entire colorectal cancer monograph.

## South Dakota Department of Health - Infectious Disease Surveillance Morbidity Report, 1 January – 28 February 2010

(provisional numbers) see <a href="http://doh.sd.gov/ID/site.aspx">http://doh.sd.gov/ID/site.aspx</a>

Disease		2010 year-	5-year	Percent	
	Diphtheria	to-date	median ()	change	
	Tetanus	0	0	n/a	
	Pertussis	5	4	n/a	
T7	Poliomyelitis	0	0	+25%	
Vaccine-Preventable	Measles	0	_	n/a	
Diseases			0	n/a	
	Mumps	0	0	n/a	
	Rubella	0	0	n/a	
	Haemophilus influenza type b	0	0	n/a	
C	HIV infection	7	5	+44%	
Sexually Transmitted Infections	Hepatitis B, acute	0	0	0%	
and	Chlamydia	414	435	-5%	
Blood-borne Diseases	Gonorrhea	50	52	-4%	
	Syphilis, early	0	0	n/a	
Tuberculosis	Tuberculosis	5	2	+150%	
Invasive Bacterial	Neisseria meningitides	0	0	n/a	
Diseases	Invasive Group A Streptococcus	0	0	n/a	
	E. coli, Shiga toxin-producing	0	1	-100%	
	Campylobacteriosis	23	17	+35%	
Enteric	Salmonellosis	12	23	-48%	
Diseases	Shigellosis	0	8	-100%	
Diseases	Giardiasis	6	13	-54%	
	Cryptosporidiosis	6	6	n/a	
	Hepatitis A	0	0	n/a	
	Animal Rabies	3	3	n/a	
	Tularemia	0	0	n/a	
Vector-borne	Rocky Mountain Spotted Fever	0	0	n/a	
, , , , , , , , , , , , , , , , , , , ,	Malaria (imported)	0	0	n/a	
Diseases	Hantavirus Pulmonary Syndrome	0	0	n/a	
	Lyme disease	0	0	n/a	
	West Nile Virus disease	0	0	n/a	
	Legionellosis	0	0	n/a	
Od D'	Streptococcus pneumoniae, drug-resistant	5	0	n/a	
Other Diseases	Additionally, the following were reported: Chicken Pox (2); Hepatitis B, chronic (1); MRSA, invasive (15)				

Communicable diseases are obligatorily reportable by physicians, hospitals, laboratories, and institutions.

The **Reportable Diseases List** is found at <a href="http://doh.sd.gov/Disease/report.aspx">http://doh.sd.gov/Disease/report.aspx</a> or upon request.

Diseases are reportable by telephone, mail, fax, website or courier.

**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". **Secure website:** <a href="https://www.state.sd.us/doh/diseasereport.htm">www.state.sd.us/doh/diseasereport.htm</a>.