



**St. Charles County Annual Communicable Disease Report
Department of Community Health and the Environment
2008**



The Communicable Disease Section

The Communicable Disease (CD) section of the St. Charles County Department of Community Health and the Environment (SCCDCHE) completed a total of 5,111 investigations in the year 2008. These reports include labs that were reported to our department including those that met Missouri Department of Health and Senior Services (MDHSS) case definition for reportable conditions/diseases and other conditions not necessarily reported to MDHSS . This is a big increase from the 2,318 reports in 2007 and the 3,317 reports from 2006. The high numbers in 2008 can be attributed to the extremely busy influenza season. There were over 2108 cases reported during the 2007-2008 influenza season and 99% of those were reported in 2008.

MDHSS Reportable Conditions: St. Charles County Report Summary

The data presented below is a summary of the reportable diseases that meet the confirmed and probable MDHSS case definition (*excluded from this report are Sexually Transmitted Diseases, Tuberculosis, and Influenza*). There were a total of 957 reportable cases in St. Charles County In 2008. Using 2007 population data of 343,952 people this gives an incidence rate of 278.2 people per 100,000 .

In 2008 we saw a decrease in the shigella and varicella numbers (which were high in 2007) and we saw an increase in Pertussis. A more in depth look at pertussis is below.

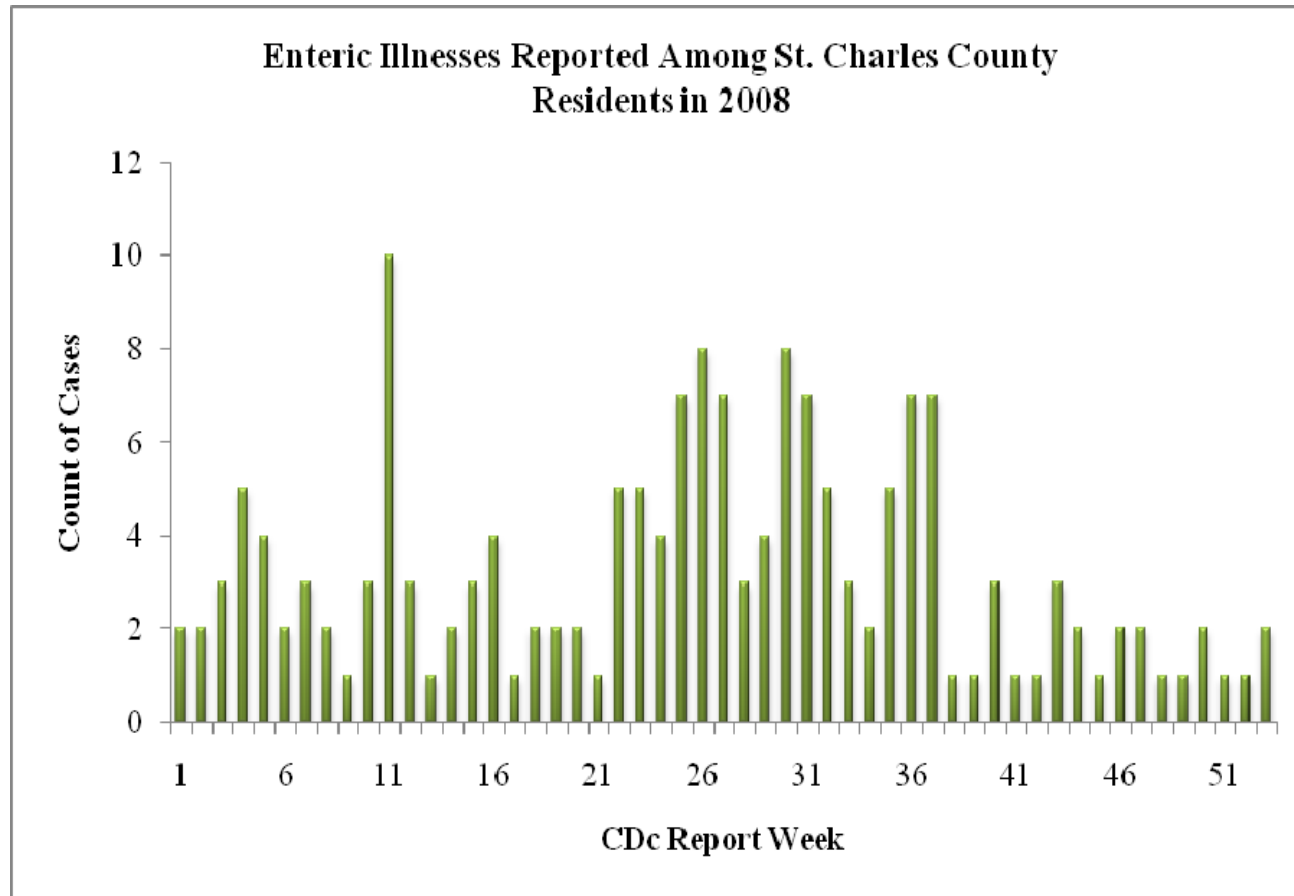
In addition to increases, 2008 saw a decrease in some diseases, particularly enteric diseases. Both shigella and campylobacter saw a decrease in the number of reported cases.

Condition Name	Year						2008 Rate per 100,000	Previous 5 year Mean	% Change From 5 Year Mean
	2003	2004	2005	2006	2007	2008			
ANIMAL BITES	7	177	279	329	324	402	116.9	223.2	44.5%
HEMOLYTIC UREMIC SYNDROME	0	1	0	0	1	3	0.9	0.4	86.7%
HEPATITIS A ACUTE	2	1	1	6	1	4	1.2	2.2	45.0%
HEPATITIS B (PREGNANCY) PRENATAL	1	4	6	11	5	7	2.0	5.4	22.9%
HEPATITIS B ACUTE	4	1	1	0	3	3	0.9	1.8	40.0%
HEPATITIS B CHRONIC INFECTION	8	15	11	4	15	16	4.7	10.6	33.8%
HEPATITIS C ACUTE	9	0	0	0	1	0	0.0	2	0.0%
HEPATITIS C, CHRONIC INFECTION	66	115	134	126	122	155	45.1	112.6	27.4%
NEUROINVASIVE WEST NILE	1	1	0	1	1	1	0.3	0.8	20.0%
NON NEUROINVASIVE WEST NILE	1	0	1	0	0	1	0.3	0.4	60.0%
Q FEVER ACUTE	0	0	0	2	2	1	0.3	0.8	20.0%

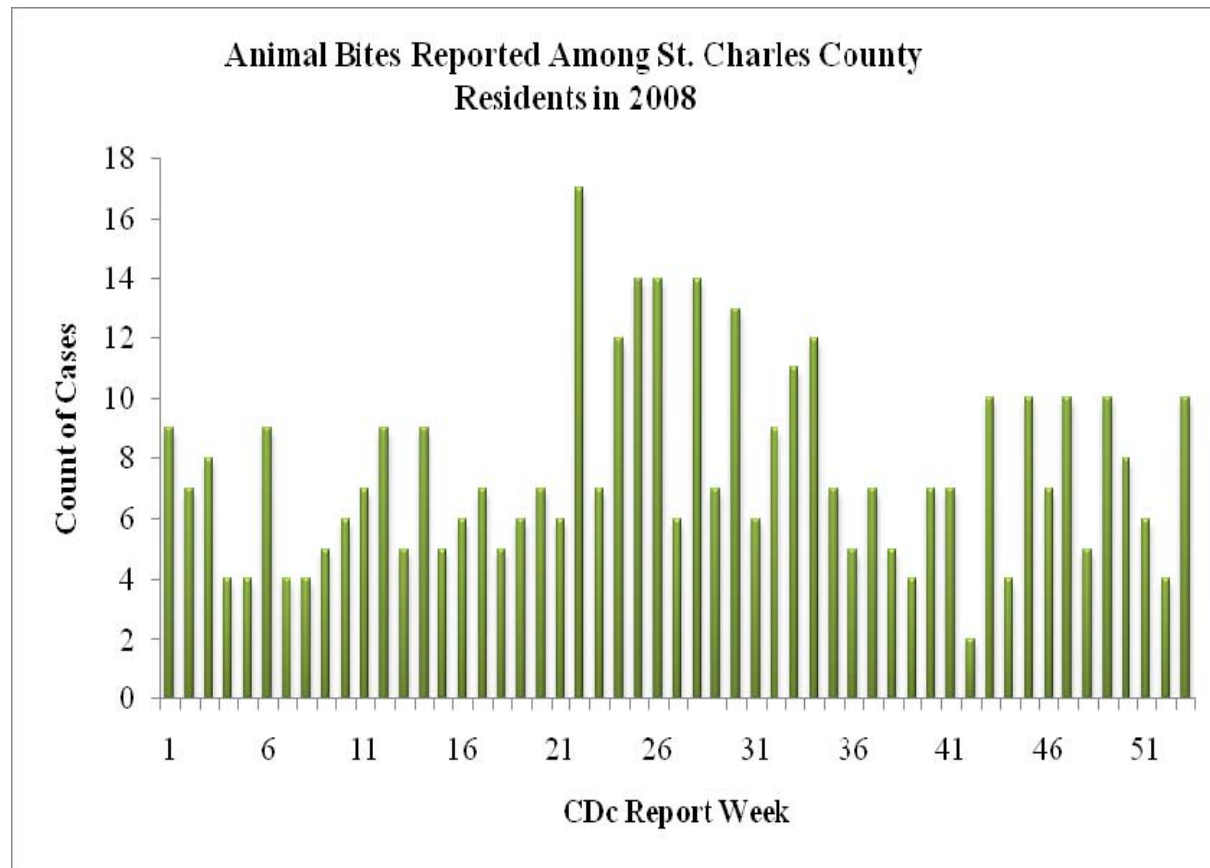
Data Source: Missouri Depart. Of Health and Senior Services (MOHSIS)

RABIES ANIMAL	0	1	1	0	0	1	0.3	0.4	60.0%
RABIES POST EXPOSURE PROPHYLAXIS	0	0	0	0	12	16	4.7	2.4	85.0%
STREP DISEASE, GROUP A INVASIVE	3	2	7	3	5	11	3.2	4	63.6%
VARICELLA (CHICKENPOX)	0	0	11	20	92	52	15.1	24.6	52.7%
ENTERIC ILLNESSES									
CAMPYLOBACTERIOSIS	31	51	28	55	48	36	10.5	42.6	-18.3%
CRYPTOSPORIDIOSIS	2	5	7	10	21	10	2.9	9	10.0%
E COLI SHIGA TOXIN POSITIVE	6	6	4	13	7	8	2.3	7.2	10.0%
E. COLI O157 H7	10	1	9	17	9	10	2.9	9.2	8.0%
GIARDIASIS	29	28	33	40	36	33	9.6	33.2	-0.6%
SALMONELLOSIS	48	47	43	39	46	47	13.7	44.6	5.1%
SHIGA TOXIN + (NON E. COLI/UNK ORGANISM)	0	0	0	1	1	4	1.2	0.4	90.0%
SHIGELLOSIS	2	5	13	4	100	22	6.4	24.8	-12.7%
TOTAL	128	143	137	179	268	170	49.4	171	-0.6%
TICK-BORNE ILLNESSES									
EHRlichia CHAFFEENSIS	1	1	1	0	2	7	2.0	1	85.7%
EHRlichiosis ANAPLASMOSIS UNDETER.	0	0	0	0	0	3	0.9	0	100.0%
LYME	0	1	0	0	0	1	0.3	0.2	80.0%
ROCKY MOUNTAIN SPOTTED FEVER	0	2	1	3	1	3	0.9	1.4	53.3%
TOTAL	1	4	2	3	3	14	4.1	2.6	81.4%
RESPIRATORY ILLNESSES									
HAEMOPHILUS INFLUENZAE, INVASIVE	0	1	4	5	0	6	1.7	2	66.7%
LEGIONELLOSIS	3	2	1	0	3	3	0.9	1.8	40.0%
PERTUSSIS	3	9	55	20	9	87	25.3	19.2	77.9%
STREP PNEUMONIAE, <5 YEARS, INVASIVE	0	0	1	0	3	1	0.3	0.8	20.0%
STREP PNEUMONIAE, DRUG-RESISTANT	0	1	1	1	1	3	0.9	0.8	73.3%
TOTAL	6	13	62	26	16	100	29.1	24.6	75.4%

Please See Graph 1 below on Enteric Illnesses. The majority of the enteric diseases reported (see table above for list of reported enteric diseases) to St. Charles County in 2008 occurred in the summer months, which is expected. The exception is the spike we saw during week 11 (March). This spike was due to a shigella outbreak. Shigella is different from some of the other enteric illnesses in that primarily spread person-to-person, not through under-cooked food or water, therefore outbreaks can occur at anytime throughout the year.



Animal bite investigations continue to be the highest reportable condition (next to influenza). Numbers usually increase during summer months. In 2008 cases averaged 10.6 cases per week during June through August, but were still high at 6.5 cases on average per week throughout the rest of the year.



St. Charles County has been battling an increase in pertussis cases since August 2008 (see graph below). Pertussis is a vaccine preventable disease that made a comeback in 2005 with 55 cases, but continued to decrease until August 2008. The majority of the cases are school age (91%) and most are under the age of 12 (85%). Seventy-six percent are fully vaccinated, meeting the 5 dose recommendation.

