



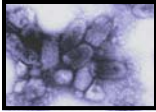
Health Watch Santa Rosa

Santa Rosa County Health Department

Special Rabies Edition

July 2011

Animal bites on increase in Santa Rosa County, risk of rabies may be heightened *Mary Beverly, RS, MPH—Epidemiology*

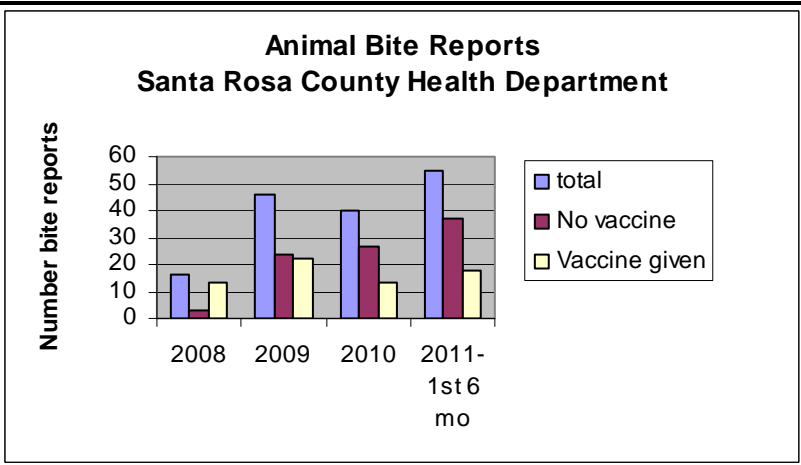


Animal bites are on the rise in Santa Rosa County and have been increasing since 2008. This is a concern due to the rabies virus circulating through the wild animal population in this area, and the potential for transmission to the domestic animal population (dogs, cats, horses, cattle), and then to humans through a bite from the domestic animal. In some cases, a person is bitten by a wild rabies vector like a raccoon. Rabies carriers, such as the raccoon, fox, bat, skunk, bobcat, coyote or otter, can incubate the virus in their body for several months without ever showing any signs of illness. It is a popular misconception that if the animal looks healthy, that it does not have rabies. This is not the case, especially with raccoons, who are known to incubate the virus anywhere from 6-9 months without visible signs of illness or aggressive behavior.



If you are bitten by a raccoon, or other rabies vector, or a domestic animal (stray cat, stray dog or ferret), consider the risk of rabies. If bitten or scratched, seek *immediate wound care* (wash thoroughly with soap and water), *see a doctor*, and *call the local health department*. In high risk situations as stated above, you will most likely need to begin the rabies vaccine series.

Since January of 2011, over 50 bite investigations were conducted by Epidemiology and Environmental Health investigators at the Santa Rosa County Health Department, with 12 individuals receiving rabies vaccine from the health department and/or local ER, due to a high risk bite. Since January 2011, 5 raccoon bites, 1 bat exposure, 1 fox bite, 4 stray dog bites and 1 cat bite were investigated by the Environmental Health and Epidemiology team. Of these bites, only the fox and bat could be tested; the others escaped. The fox and bat were both positive for rabies as reported by the Pensacola State Laboratory.



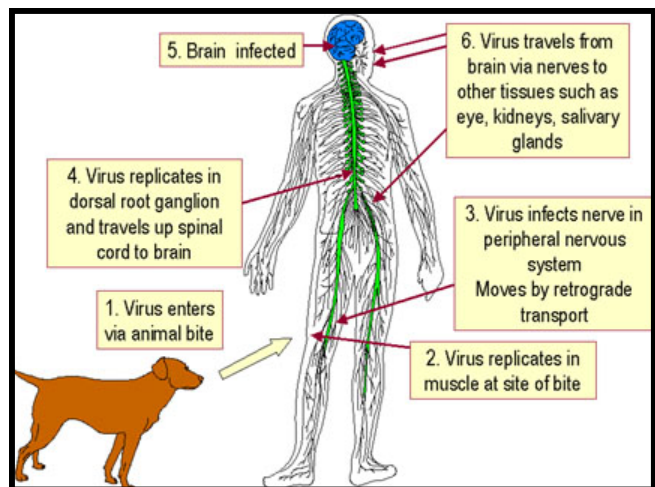
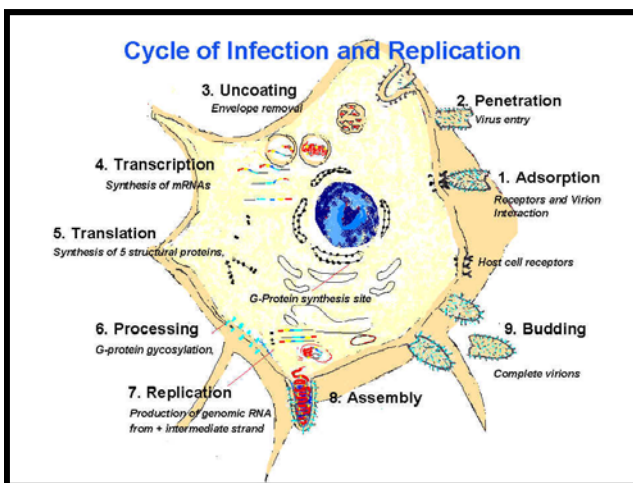
All individuals bitten by the animals above received the rabies vaccine series as recommended (FDOH, Rabies Prevention and Control in Florida, 2011 guide). The vaccine series ranges in cost from \$1,000 to \$2500 per person. For this reason, it falls on the medical professional providing wound care to assess the bite circumstance, the biting animal, whether the animal is current on rabies vaccine or if not, whether the animal is available for testing. This information is important to know before making the recommendation to give rabies vaccine. If you have questions or concerns regarding the recommendations for rabies vaccine, please call the SRCHD at 850-983-5200 x105 or x199.

Rabies: Disease Incidence and clinical presentation



Rabies is a “nerve loving” virus and is sensitive to sunlight, UV radiation and strong acids and bases. Rabies is transmitted to humans through a mucous membrane that becomes infected with saliva or tissue from an infected animal (raccoon, bat, fox, skunk, otter, bobcat, or any susceptible mammal). Most transmission occurs through a bite from the infected animal. The virus begins to replicate from the site of the bite or scratch. It then travels from the muscle and connective tissue and into nerve endings where it then travels on to the spinal cord and brain. Once the virus reaches the brain, the victim begins to experience acute progressive encephalomyelitis (acute swelling of the brain). The virus will then spread from the brain to the salivary glands and other organs. Signs and symptoms of rabies in humans are similar in presentation to other mammals.

The symptoms are: general weakness, discomfort, fever, headache, prickling or itching at the site of the bite, cerebral dysfunction, anxiety, confusion, agitation, delirium, meningitis, abnormal behavior, photophobia and difficulty swallowing. The incubation period usually ranges from 1 to 3 months after exposure, but can vary from days to years, making this disease difficult to diagnose. Clinicians should ask about travel history and any animal bites within the last 2 years. Once a person begins to exhibit signs of rabies, survival is rare. The length of the incubation period depends on the size of the inoculum and the proximity to the brain and central nervous system. An immediate report to the local health department must be made and the human post exposure prophylaxis (HRIG and 4 doses) is recommended in high risk situations. See CDC guidelines: <http://www.cdc.gov/mmwr/PDF/rr/rr5703.pdf> . To date, less than 10 documented human cases in the world have survived rabies. Only 3 cases in the US have survived without prompt rabies post exposure prophylaxis, and in most cases, a diagnosis is not made in time. Extensive neurological sequelae is expected for the patient who survives. Video of hydrophobia in a human-go to video S1. Warning may be disturbing for some viewers. <http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1000044#pmed->



1. Raccoon or other vector is bitten by a rabid animal
2. Virus enters wound via saliva
3. Virus spreads through nerves to spinal cord and brain
4. Incubation period of 3-12 weeks with no symptoms
5. In brain the virus replicates and spreads to other tissues including the salivary glands. Signs of disease occur
6. The animal dies within a week

Source: <http://pathmicro.med.sc.edu/virol/rabies.htm>

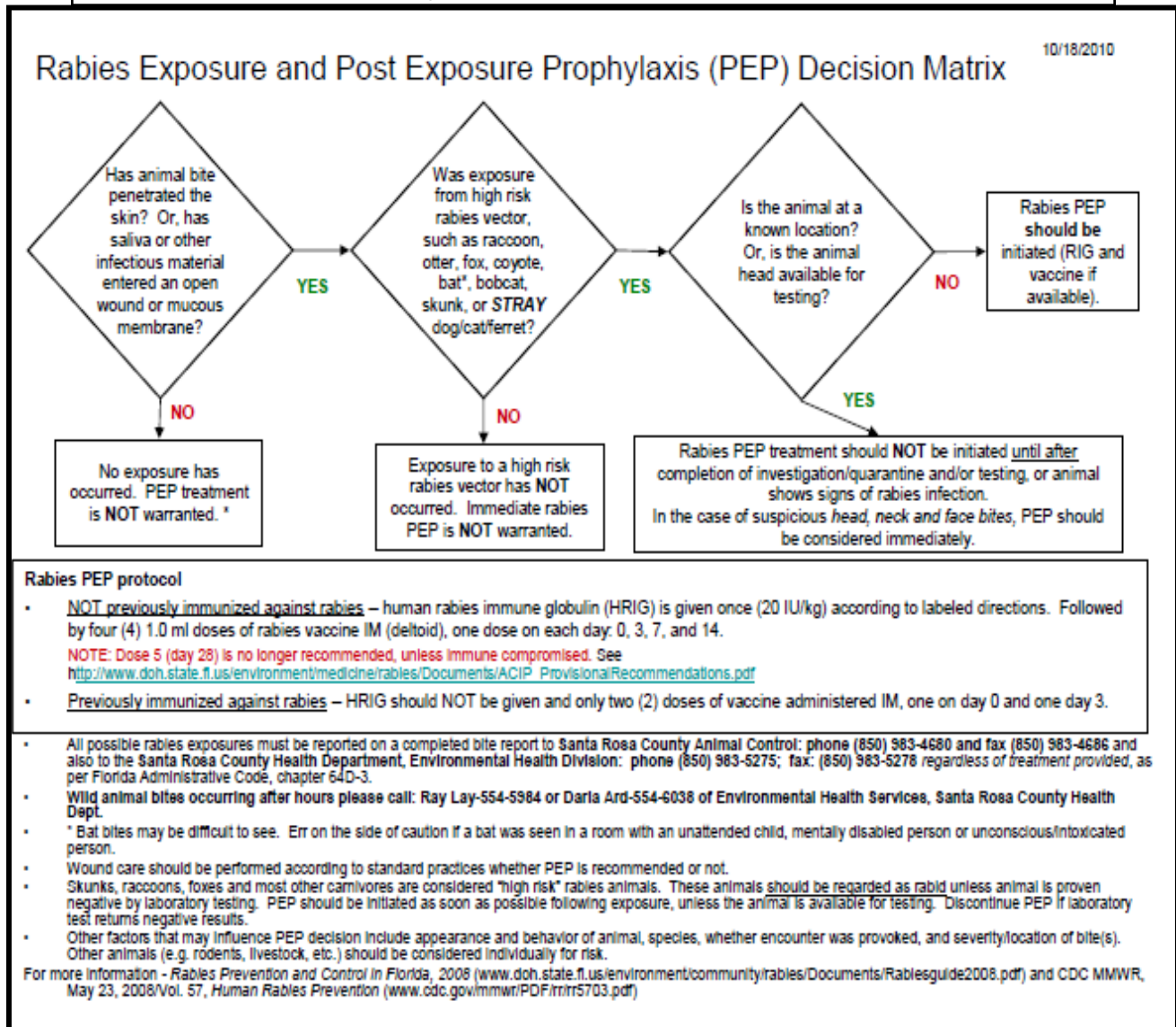
ER , Urgent Care and Primary Care Clinicians: please report animal bites!



Providers: We need your assistance in the reporting of all animal bites and other significant possible rabies exposures. As stated in the Reportable Diseases and Conditions in Florida, 2008, “rabies, possible exposures” are reportable in accordance with Florida Administrative Code 64D-3 and Florida Statute 381.0031 (1,2).

1. Call Santa Rosa Animal Control to report all animal bites- 850-983-4680.
2. Call Santa Rosa County Health Department-(Environmental Health) to report wild rabies vector bites to humans (raccoon, bat, fox, skunk, bobcat, coyote, otter) or monkey bites and rodent bites-850-983-5275.
3. Call Santa Rosa County Health Department-(Epidemiology) - 850-983-5200 x105, or after hours hotline for reportable diseases at 850-418-5566 for assistance with human rabies vaccine recommendations or for advice on low risk exposures such as with rodent bites. Notify Epi immediately if you have begun the rabies series for the patient (HRIG and 1st dose). Confidential fax-850-983-4504
4. Follow the below algorithm for determining when to give human rabies vaccine.

Santa Rosa County Rabies Vaccine Decision Matrix



Incidence of disease and animal vectors



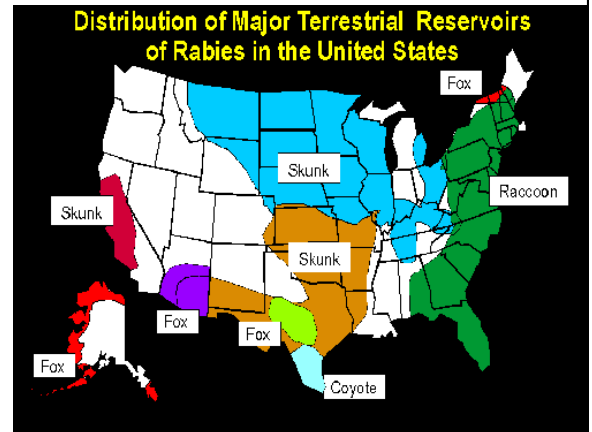
Rabies is nearly always fatal and occurs in most countries throughout the world. Over the last 100 years, rabies incidence in the US has changed dramatically since the advent of dog and cat vaccinations. In the US, rabies prevalence depends largely on animal control and rabies vaccination programs. Since 1940, the US cases of rabies have declined from 50 cases per year to 2 cases per year. However, even with the low incidence of human cases, the incidence of wild animal rabies cases continues to climb. In the US, animal bites are increasing, and in Florida there are approximately 60,000 residents (especially children) bitten each year by some type of domestic animal. (source: <http://www.cdc.gov/rabies/exposure/index.html> and <http://emedicine.medscape.com/article/220967-overview> and FDOH, DEPHM). Rabies vaccination and the spay/neuter of pets is decreasing, which is likely due to harder economic times.



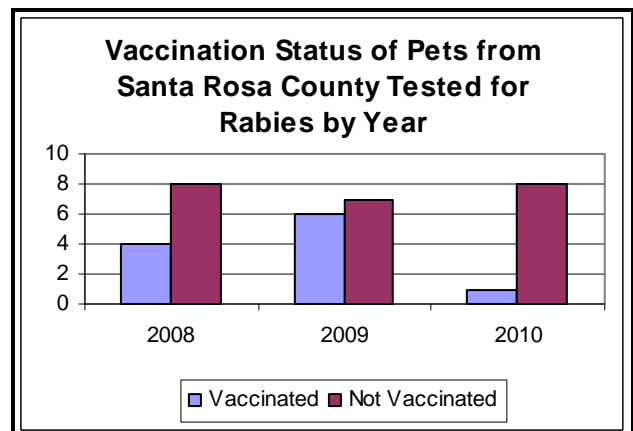
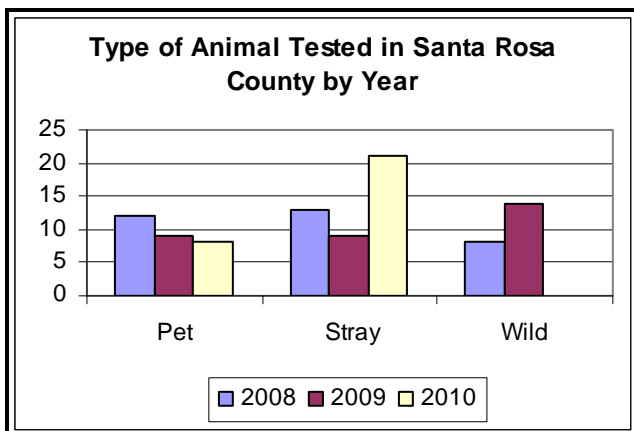
Urban sprawl is increasing, leading to the destruction of wild animal habitats, which in turn, leads to the encroachment and increased exposure to wild animal rabies vectors. In addition, an increase in stray animal populations (dogs and cats) leads to potential risk of attack by rabies vectors. This is why spaying and neutering is so important. Unvaccinated dogs serve as the main reservoir for rabies worldwide, and are the primary biting animal in Florida. However, feral cats have tested positive for rabies across the country due to overpopulation and contact with rabies vectors. These exposures have led to increased use of human post exposure prophylaxis. Raccoons are the primary rabies vector in Florida, following by the bat, fox and skunk.



Approximately 40,000 people per year receive rabies post exposure prophylaxis (HRIG + 4 vaccine doses on day 0, day 3, day 7 and day 14) due to a bite from a wild rabies vector or stray dog or cat. This could be avoided if domestic animals were vaccinated for rabies annually by a licensed veterinarian and contact with stray cats and dogs and wild animal rabies vectors was avoided. In Santa Rosa County, Florida most animals tested are unvaccinated stray dogs and cats. (source: FDOH, Bureau of Labs, Pensacola)



Rabies annually by a licensed veterinarian and contact with stray cats and dogs and wild animal rabies vectors was avoided. In Santa Rosa County, Florida most animals tested are unvaccinated stray dogs and cats. (source: FDOH, Bureau of Labs, Pensacola)



Rabies is preventable! Vaccinate your pets!

Mandatory Domestic Animal Isolation



In most cases, the health department and animal control are called to investigate bite circumstances. Most reports are received through a hospital ER, clinic, veterinarian, or general public. All bites where it is determined that a rabies “possible exposure” has occurred are required to be reported to the health department by a medical provider. However, many bites go unreported if the bite is not severe enough to warrant a visit to a physician.

The need for animal isolation is evaluated by the health department by looking at the vaccination status of the animal and the biting circumstance. If the biting animal is unvaccinated or delinquent for rabies vaccine, a 10 day isolation period is required to look for signs and symptoms of rabies in the animal. This isolation period is very useful because it will prevent the bite victim from having to undergo the rabies vaccine series, in most cases, and may also prevent litigation from the bite victim to the pet owner. Please cooperate with your local county health department when these situations arise. This animal isolation is mandated by Florida Statute 381 and FAC 64D-3.

So, what can you do to prevent rabies?



1. Keep your pet vaccinated and prevent your pet from biting people by being a responsible pet owner. Keep your pet leashed and spayed or neutered to prevent escape behaviors.

2. Avoid contact with stray/feral cats and stray dogs, and educate your children to avoid them. Report strays to Santa Rosa Animal Control—850-983-4680.



3. Report bites from stray domestic animals to Santa Rosa Animal Control at 850-983-4680.

4. Report *wild* animal bites, especially those from rabies vectors, to the Santa Rosa County Health Department by calling 850-983-5275 or after hours Epidemiology hotline 850-418-5566.



5. If you encounter a wild rabies vector such as a raccoon, fox, coyote, bat, skunk, bobcat or otter, but no bite has occurred, simply **avoid the animal**. Call Emerald Coast Wildlife Refuge at 850-650-1880 if the animal appears sick or lost. Call Santa Rosa Animal Control 850-983-4680 and Florida Fish and Wildlife at 850-265-3676 if the animal appears to be a threat to people.

The successful control of rabies takes a community approach involving people in the community, health departments, animal control, wildlife officials, hospitals, physicians and veterinarians. We all have to work together to assure that rabies does not resurge in our county, state and country. Thank you for your support!



Thank you to our reporting providers and laboratories!



This list below reflects *provisional* incidence of reportable diseases in Santa Rosa County through June, 2011. This data is reported to the Santa Rosa County Health Department/FDOH and is obtained from local hospitals, laboratories and physicians who report, as required by FS 381.0031 (1,2). We would like to thank our providers and laboratories for prompt reporting of statewide reportable diseases. Please see page 5 for the complete list of reportable diseases for the State of Florida. Please continue to use us (SRCHD-Epidemiology) as a resource for reporting and surveillance. You are our “eyes and ears” for disease control and prevention! Call us with any questions or concerns at (850) 983-5200 x105 or x140; we are here to help.

Reportable Disease incidence Santa Rosa County—2011 Year to date

Santa Rosa County- Reportable Disease Incidence Report
2005-present

DISEASES							YEAR TO DATE				CALENDAR YEAR 2011												
							6 YEAR HISTORY		3 YEAR HISTORY														
	2005	2006	2007	2008	2009	2010	EXPECTED TO DATE	ACTUAL	EXPECTED TO DATE	ACTUAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
AIDS †	9	6	9	6	7	5	4	9	3	9	0	1	1	3	3	1							
ANIMAL BITE, PEP RECOMMENDED	8	5	21	13	22	14	7	18	8	18	4	2	2	0	4	6							
ANIMAL RABIES	0	0	0	1	3	0	0	2	1	2	0	1	0	0	1	0							
CAMPYLOBACTER	1	6	5	7	13	10	4	5	5	5	1	1	0	0	2	1							
CARBON MONOXIDE	-	-	-	-	-	0	0	0	0	1	0	0	1	0	0	0							
CHLAMYDIA †	182	170	258	306	275	360	129	183	157	183	33	34	27	28	42	21							
CIGUATERA	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
CREUTZFELDT-JAKOB DISEASE	-	-	-	-	1	0	0	0	0	0	0	0	0	0	0	0							
CRYPTOSPORIDIUM	0	5	7	2	13	1	2	0	3	0	0	0	0	0	0	0							
CYCLOSPORIASIS	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
E. COLI (O157:H7)	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0							
E. COLI (NON-O157:H7)	0	0	0	0	1	2	0	0	1	0	0	0	0	0	0	0							
ENCEPHALITIS (other non-arboviral)	-	-	-	-	1	1	1	0	1	0	0	0	0	0	0	0							
GIARDIA	4	3	7	18	8	12	4	4	6	4	1	0	1	0	1	1							
GONORRHEA †	44	75	54	53	61	36	27	37	25	37	5	9	8	4	7	4							
H. INFLUENZAE	0	0	1	2	4	4	1	4	2	4	2	1	1	0	0	0							
HEPATITIS A	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0							
HEPATITIS B acute	3	2	2	7	2	2	2	1	2	1	0	0	1	0	0	0							
HEPATITIS B chronic	3	1	8	17	40	10	7	10	11	10	2	4	2	0	0	2							
HEPATITIS B-PERINATAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
HEP B-preg woman	0	0	2	1	3	3	1	1	1	1	0	0	1	0	0	0							
HEPATITIS C acute	1	0	0	2	1	3	1	0	1	0	0	0	0	0	0	0							
HEPATITIS C chronic	30	18	225	301	278	262	93	146	140	146	35	23	17	23	24	24							
HIV †	11	8	15	10	9	7	5	11	4	11	1	3	2	2	1	2							
INFLUENZA A, NOVEL OR PANDEMIC	-	-	-	-	32	2	9	0	9	0	0	0	0	0	0	0							
LEAD LEVEL >10	0	0	0	3	1	8	1	2	2	2	0	2	0	0	0	0							
LEGIONELLOSIS	0	0	4	1	2	2	1	0	1	0	0	0	0	0	0	0							
LISTERIOSIS	-	-	-	-	1	0	0	0	0	0	0	0	0	0	0	0							
LYME DISEASE	0	0	0	0	2	2	0	0	1	0	0	0	0	0	0	0							
MALARIA	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0							
MENINGOCOCCAL (Neisseria)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
MENINGITIS (bacterial, crypto, mycot)	2	1	4	2	4	2	1	1	1	1	0	0	0	0	0	1							
MUMPS	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0							
PERTUSSIS (confirmed)	0	1	0	4	64	28	8	0	16	0	0	0	0	0	0	0							
PERTUSSIS (probable)	0	0	0	1	16	3	2	0	3	0	0	0	0	0	0	0							
PESTICIDE RELATED INJURY	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0							
ROCKY MTN SPOT FEVER	0	1	0	3	0	1	0	0	1	0	0	0	0	0	0	0							
SALMONELLA	34	36	69	47	55	70	26	22	29	22	5	0	6	5	3	3							
SHIGELLA	0	1	11	3	4	1	2	1	1	1	0	0	0	1	0	0							
S. AUREUS COMM-ASSOC MORTAL	-	-	-	-	1	1	1	0	1	0	0	0	0	0	0	0							
STREP. GROUP A, INV	1	0	0	2	6	1	1	0	2	0	0	0	0	0	0	0							
STREP PNEU. INV.	12	3	6	20	11	17	6	9	8	9	1	2	3	1	1	1							
INFECTIOUS SYPHILIS †	0	0	1	0	2	5	1	1	1	1	0	0	0	0	1	0							
TUBERCULOSIS †	0	2	3	2	3	2	1	0	1	0	0	0	0	0	0	0							
VARICELLA ●	-	1	19	12	14	29	8	9	9	9	1	2	2	2	1	1							
VIBRIO (vulnificus)	1	1	0	1	0	2	0	0	1	0	0	0	0	0	0	0							
VIBRIO (other)	1	1	2	4	1	3	1	2	1	2	0	0	0	0	1	1							
WEST NILE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
TOTAL	349	348	734	853	951	922	355	479	458	479	91	85	75	67	92	69	0	0	0	0	0	0	0

Grey shading indicates value less than -2 StdDev Red shading indicates value greater than +2 StdDev ● Newly reportable in 2007 ★ Newly reportable 2009
 † Expected Number Based on last 6 years average, prorated to ds **Expected Number Based on last 3 Year Average, prorated to date (-) Data from year disease was not reportable
 + Information is provisional and reflects data reported by the FDOH Bureau of STD Control and Prevention and HIV/AIDS Surveillance
 All other data is from the FDOH Bureau of Epidemiology Merlin database (date entered range)



The Santa Rosa County Health Department

Working for a Healthy Community

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850-983-5200, ext. 140
After hours: 850-418-5566
(Fax 850-983-4504)

Locations

Milton Clinic
5527 Stewart Street
Milton, FL 32570

Environmental Health Services
5505 Stewart Street
Milton, FL 32570

Midway Clinic
5840 Gulf Breeze Parkway
Gulf Breeze, FL 32563

Jay Location
14122 Alabama Street
Jay, FL 32565

Contact Information

Phone: 850-983-5200
Fax: 850-983-4504
WIC: 850-983-5250

Phone: 850-983-5275
Fax: 850-983-5278

Phone: 850-934-4074 Clinic
850-934-5170 WIC

Phone 850-675-4211
Office Hours: Wed Only 9am-12pm

Join MRC Santa Rosa!

Mary Beverly, RS, MPH
MRC Program Manager
Santa Rosa County Health Department

Volunteers Building Strong, Healthy and Prepared Communities



As the Santa Rosa MRC Unit Director, I would like to invite you to join the Santa Rosa Medical Reserve Corps! The Medical Reserve Corps is a national organization of volunteers who devote their time to assuring that communities are ready for all kinds of public health disasters, namely hurricanes. The Santa Rosa MRC unit provides training for volunteers to prepare for disaster (ICS 100, 700, core competencies etc) and will mobilize volunteers to work within Santa Rosa County and abroad.

Call us at (850) 983-5200 or go to www.servfl.com to register as a volunteer today! Also go to medicalreservecorps.gov and floridamrc.com to learn more about MRC.

The MRC Mission:

To augment local community and state-level health and medical services with pre-identified, trained and credentialed volunteers during emergency medical operations and other vital public health activities.