

Epi Monthly Report

Can Current Disease Reporting Systems Capture All Animal Bites?

Miami-Dade County, Florida, 2006

Erin O'Connell, MPH, Guoyan Zhang, MD, MPH, Fermin Leguen, MD, MPH, Ana Torrecilla, Marie Etienne, RN, Anthony Llau, MPH, Diana Rodriguez, MPH

Background

The American Veterinary Medical Association estimates that the US has over 4.5 million animal bites annually from dogs; about 1% require hospitalization. Dog bites constitute 80-85% of all reported incidents, cats account for 10% and other animals make up the remaining 5-10%. The State of Florida Chapter 64D-3 regarding the control of communicable diseases does not mandate all animal bites to be reported. It states that animal bites are *only reportable when they result in rabies prophylaxis for the person exposed, rabies testing and/or quarantine of the animal causing the exposure or the bite is from an animal capable of transmitting herpes B viruses*. Although it is encouraged that providers report any animal bites to the county health department, because it is not required by law, many bites are not reported. Miami-Dade County Health Department (MDCHD) has an Animal Bite Program that uses several data sources to monitor animal bites in the community. This is the first study to compare all of them.

Methods

The 2006 information utilized came from four data sources: 1) Miami-Dade Fire Rescue 911 Center, 2) hospital emergency department (ED) visits in Electronic Surveillance System for the Early Notification of Community Based Epidemics (ESSENCE), 3) Post-exposure prophylaxis (PEP) for rabies recommendations reported in the FL Department of Health surveillance system, Merlin and 4) MDCHD Animal Bite Program database, which includes reports from hospitals, the Miami-Dade County Animal Services Department, veterinarian clinics and community residents. Data was analyzed using SAS 9.13.

Results

1. 911 Center

There were 452 calls to the 911 Call center about animal bites in 2006.

2. Hospital Emergency Department Data

For ED visits identified in ESSENCE, there were a total of 1,824 visits and among those, 529 (29.0%) were children 0 – 14 years. For these visits, 30.9% of victims were White, 53.5% were

Inside this issue:

Can Current Disease Reporting Systems Capture All Animal Bites? Miami-Dade County, Florida, 2006

1

Can Current Disease Reporting Systems Capture All Animal Bites?

2

Selected Notifiable Disease Reports, Historical data, August 2008

3

Avian Flu Watch

4

Monthly Report, Selected Reportable Diseases/ Conditions in Miami-Dade County, August 2008

5

*Fermin Leguen, MD, MPH
Chief Physician, Miami-Dade County Health Department
Director, Office of Epidemiology and Disease Control*

*8600 NW 17th Street
Suite 200
Miami, Florida 33126*

*Tel: (305) 470-5660
Fax: (305) 470-5533
E-mail:
Fermin_Leguen@doh.state.fl.us*



Hispanic, and 6.9% were Black Non-Hispanic. This is compared to the 61.3% Hispanic, 18.3% White and 18.3% Black population of the county. Animal bites were more common in females than males in the 0-14 age group and as age increased, bites were more common in males (Figure 1). The number of animal bite ED visits was highest on Saturday and Sunday and for seasonality, the least number of animal bites were reported in the Summer.

[3. Miami-Dade County Health Department Animal Bite Database](#)

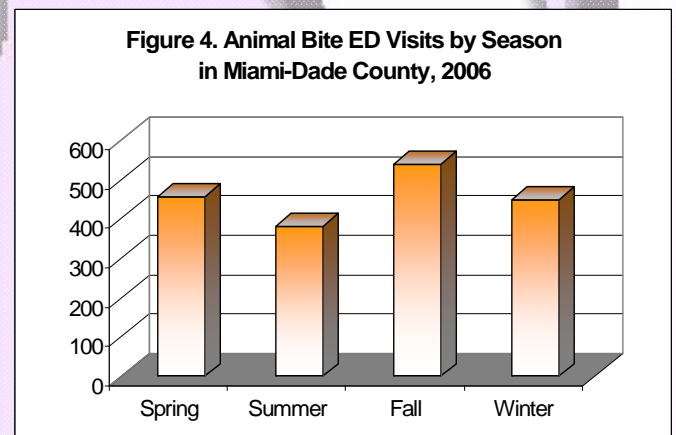
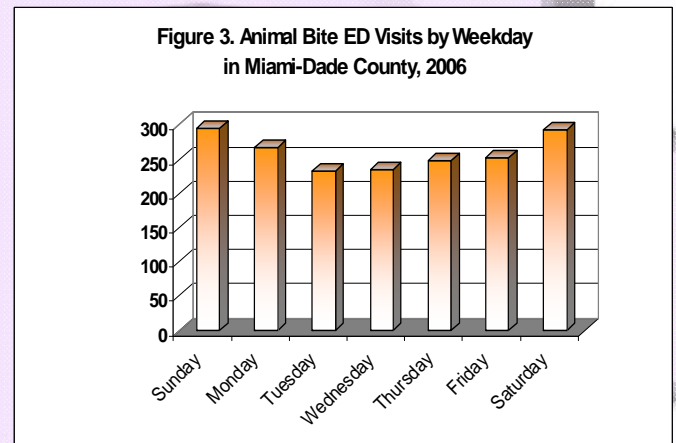
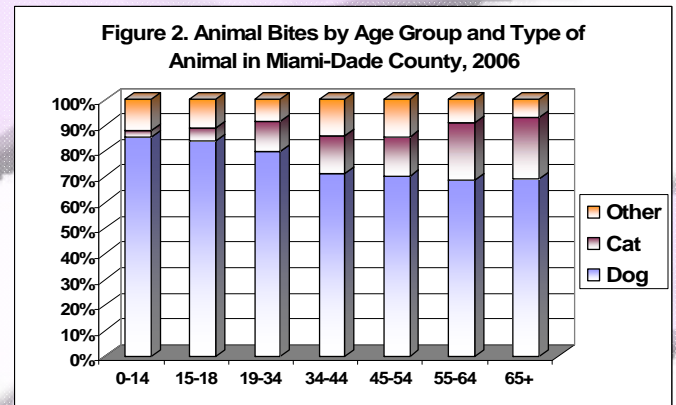
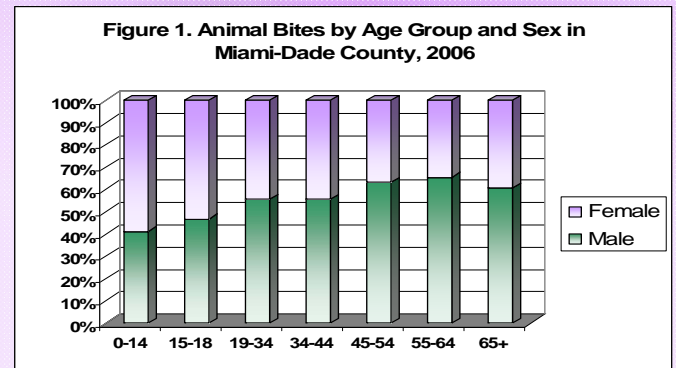
There were 1,345 events notified to the MDCHD. Of these 1,345 visits, 552 (41.0%) were reported from a hospital. Children 0 - 14 years represented 24.6% (331/1,345) of all animal bites notified to MDCHD. The majority (85.3%) of the bites reported were from dogs. In addition, the percentage of dog bites among all bites decreased and the percentage of cat bites increased with age (Figure 2). Cat bites were highest among those 65 years and older.

[4. Merlin post-exposure prophylaxis data](#)

Although 43 of the 1,345 (3.2%) victims from the MDCHD Animal Bite Program were shown to take PEP, only 14 (32.6%) were reported in Merlin. The median number of days that it took from the date of the bite to the date that it was reported to the health department was 2 days (Range: 0—45 days).

Conclusions

Of the 1,824 hospital ED visits in ESSENCE, only 552 (30.3%) hospital visits were reported to the MDCHD Animal Bite Program. Additionally, 14 of the 43 (32.6%) cases in which PEP recommendations were made in Merlin were also reported in the MDCHD Animal Bite Program. Systematic quality control measures and an educational campaign among providers should be implemented to improve accuracy and timeliness of current animal bite surveillance.



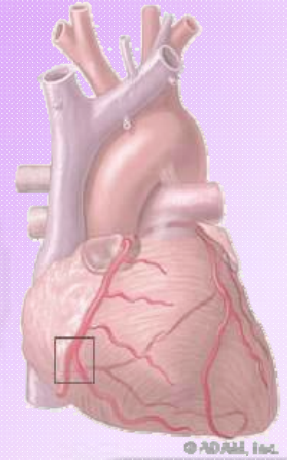
SEPTEMBER IS...

- ALCOHOL & DRUG ADDICTION RECOVERY MONTH
- BABY SAFETY AWARENESS MONTH
- **CHOLESTEROL EDUCATION MONTH**
- FOOD SAFETY EDUCATION MONTH
 - HEALTHY AGING MONTH
- HOME & SPORTS EYE SAFETY MONTH
- MENOPAUSE AWARENESS MONTH
- PROSTATE CANCER AWARENESS MONTH

**N
E
A
L
T
H**



Blockage in right coronary artery



© ADAM, Inc.

The National Heart, Lung, and Blood Institute offers helpful resources to use during National Cholesterol Education Month.

Why Is Cholesterol Important?

Blood cholesterol level has a lot to do with the chances of getting heart disease. In fact, the higher the blood cholesterol level, the greater risk for developing heart disease or having a heart attack. Heart disease is the #1 killer of women and men in the United States. Each year, more than a million Americans have heart attacks, and about a half million people die from heart disease.

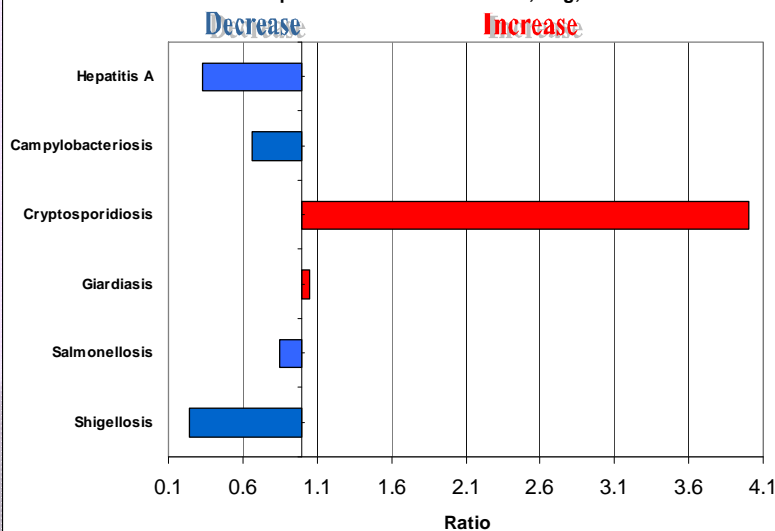
What Affects Cholesterol Levels?

A variety of things can affect cholesterol levels. These are things you can do something about:

- **Diet.** Reducing the amount of saturated fat and cholesterol in your diet helps lower your blood cholesterol level.
- **Weight.** Being overweight is a risk factor for heart disease. Losing weight can help lower your LDL and total cholesterol levels, as well as raise your HDL and lower your triglyceride levels.
- **Physical Activity.** Regular physical activity can help lower LDL (bad) cholesterol and raise HDL (good) cholesterol levels. Try to be physically active for 30 minutes on most, if not all, days.

LIFESTYLE

Selected Notifiable Disease Reports, Miami-Dade County, Comparison with Historical Data, Aug, 2008

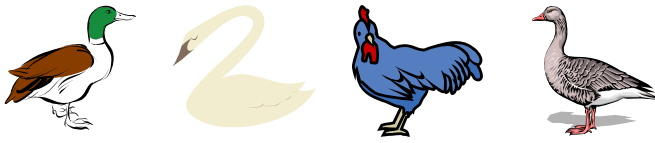


TO REPORT ANY DISEASE AND FOR INFORMATION CALL:
Office of Epidemiology and Disease Control

- Childhood Lead Poisoning Prevention Program305-470-6877
- Hepatitis305-470-5536
- Other diseases and outbreaks305-470-5660
- HIV/AIDS Program305-470-6999
- STD Program305-325-3242
- Tuberculosis Program 305-324-2470
- Special Immunization Program786-845-0550

AVIAN FLU WATCH

Unless indicated, information is current as
of
September 2008



- Since 2003, there have been 387 human cases of avian influenza (H5N1) confirmed by the World Health Organization (WHO). Of these, 245 cases have died. This means there is a 63% (245/387) fatality rate.
- **15 Countries with confirmed human cases** include Bangladesh, Cambodia, China, Djibouti, Indonesia, Thailand, Vietnam, Iraq, Azerbaijan, Egypt, Turkey, Nigeria, Pakistan, Myanmar, and Lao People's Democratic Republic .



- **No human cases of avian influenza (H5N1) have been reported in the United States.**
 - **H5N1 has been confirmed in birds in several other countries since 2003.** H5N1 has been documented in birds in more than 30 countries in Europe & Eurasia, South Asia, Africa, East Asia and the Pacific, and the Near East. For a list of these countries, visit the World Organization for Animal Health Web Site at :
http://www.oie.int/downld/AVIAN%20INFLUENZA/A_AI-Asia.htm.
 - **No restrictions on travel to affected countries have been imposed.** Travelers should avoid contact with live poultry and monitor their health for ten days after returning from an affected country.
- SOURCES: WHO, OIE, CDC

PARTICIPATE IN INFLUENZA SENTINEL PROVIDER SURVEILLANCE

The Miami-Dade County Health Department
NEEDS Influenza Sentinel Providers!!

Sentinel providers are key to the success of the Florida Department of Health's Influenza Surveillance System. Data reported by sentinel providers gives a picture of the influenza virus and ILI activity in the U.S. and Florida which can be used to guide prevention and control activities, vaccine strain selection, and patient care.

- Providers of any specialty, in any type of practice, are eligible to be sentinel providers.
- Most providers report that it takes **less than 30 minutes a week** to compile and report data on the total number of patients seen and the number of patients seen with influenza-like illness.
- Sentinel providers can submit specimens from a subset of patients to the state laboratory for virus isolation **free of charge**.

For more information, please contact **Erin O'Connell** at 305-470-5660.

About the Epi Monthly Report

The Epi Monthly Report is a publication of the Miami-Dade County Health Department, Office of Epidemiology and Disease Control, The publication serves a primary audience of physicians, nurses, and public health professionals. Articles published in the Epi Monthly Report may focus on quantitative research and analysis, program updates, field investigations, or provider education. For more information or to submit an article, contact Lizbeth Londoño at 305-470-6918.

Monthly Report
Selected Reportable Diseases/Conditions in Miami-Dade County,
August 2008

Diseases/Conditions	2008 this Month	2008 Year to Date	2007 Year to Date	2006 Year to Date	2005 Year to Date	2004 Year to Date
AIDS ^{*Provisional}	77	849	548	810	945	951
Campylobacteriosis	10	87	104	119	103	103
Ciguatera Poisoning	6	18	0	0	0	0
Cryptosporidiosis	12	23	20	13	18	15
Cyclosporiasis	1	5	0	0	11	1
Dengue Fever	2	3	3	1	1	3
<i>E. coli</i> , O157:H7	0	3	1	0	0	2
<i>E. coli</i> , Non-O157	0	0	0	0	1	0
Encephalitis (except WNV)	1	5	1	0	0	1
Encephalitis, West Nile Virus	0	0	0	0	0	11
Giardiasis, Acute	25	165	180	141	140	207
Hepatitis A	3	22	22	29	38	29
Hepatitis B	3	13	10	18	35	26
HIV ^{*Provisional}	132	1144	1424	764	1005	1175
Influenza A (H5)	0	0	0	0	0	0
Influenza Isolates	0	0	0	0	0	0
Influenza Novel Strain	0	0	0	0	0	0
Influenza, Pediatric Death	0	0	0	0	0	0
Lead Poisoning	18	111	105	101	113	197
Legionnaire's Disease	1	6	1	7	2	7
Leptospirosis	0	0	0	0	2	0
Lyme disease	1	4	0	0	0	3
Malaria	2	6	7	10	7	11
Measles	0	0	0	0	0	1
Meningitis (except aseptic)	0	3	6	11	11	8
Meningococcal Disease	0	6	5	8	5	12
Mumps	0	2	2	0	0	0
Pertussis	4	17	13	5	9	9
Rubella	0	1	0	0	0	0
Rubella, Congenital	0	0	0	0	0	0
Salmonellosis	49	287	244	348	319	294
Shigellosis	5	32	94	83	192	124
<i>Streptococcus pneumoniae</i> , Drug Resistant	10	79	62	78	53	53
Tetanus	0	0	0	0	0	0
Toxoplasmosis	0	0	1	0	9	4
Tuberculosis ^{*Provisional}	17	115	106	134	125	152
Typhoid Fever	1	1	1	3	2	2
<i>Vibrio cholera</i> Type O1	0	0	0	0	0	0
<i>Vibrio cholera</i> Non-O1	0	0	0	0	0	0
<i>Vibrio</i> , Other	0	0	0	0	0	0
West Nile Fever	0	0	0	0	0	3



*Data on AIDS are provisional at the county level and are subject to edit checks by state and federal agencies.

** Data on tuberculosis are provisional at the county level.