EPIDEMIOLOGY BULLETIN

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Epidemiology of Animal Bites

Animal bite reports maintained by Newport News sanitarians were reviewed for the year 1983. Of 402 reported animal bites, only 25% were reported by the victim or animal owner; all others were reported by a physician or hospital. Most bites (62%) were on the head, hands, or arms.

The vast majority of bites were caused by dogs (see Figure), with cats coming in a distant second. Other species (see inset for a breakdown) caused only 6% of bites. The number of males bitten by dogs was twice the number of females. By contrast, cats bit females three times more often than males. Forty-three percent of dogs causing bites had not been adequately immunized against rabies.

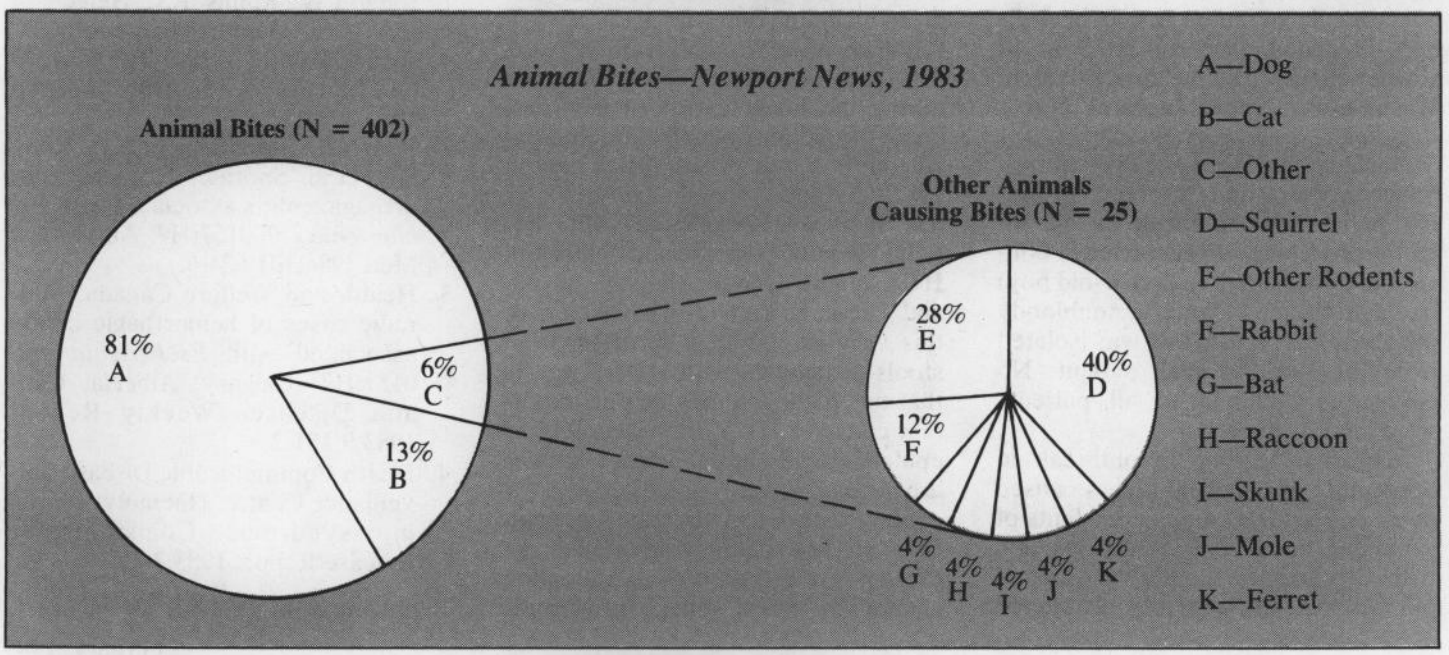
Most bites (85%) were considered provoked by the victim. Activities victims had been engaged in at the time of the bites included: playing with the animal (31%), approaching the animal (27%), walking or jogging near the animal (10%), breaking up an animal fight (6%), and other (26%). Most (72%) of the victims for whom age was known were 10 years old or less.

Dog bites were reported significantly more often during the warmer months May through August. The mean number of dog bites reported per month during this period was 36, compared with a mean of 23 during the colder months ($p<0.01$, two-tailed t test). There was no apparent seasonal pattern to reported cat bites.

Of the 402 biting animals, 358 (89%) were quarantined and observed for signs of rabies, 7 (2%) were sacrified and tested for rabies (all were negative), and 37 (9%) could not be found. Only two bite victims received rabies prophylaxis; both had been bitten by animals that could not be found.

Reported by Ray T. Allmond, R.S. (retired), and Paul H. Sandman, R.S., Sanitarian Manager, Newport News Health Department

Editor's comment: Given the high number of animal bites per year in all localities, it is reassuring to note that, at least in Newport News, appropriate action (e.g. quarantine of the biting animal) has helped prevent unnecessary prophylaxis with rabies immune globulin and vaccine. This report reinforces the evidence that children are the ones at highest risk for animal bites; they should continue to be instructed by their parents in safe behavior around animals (see Greensher J. Prevention of childhood injuries. Pediatrics 1984; 74 (suppl): 970-975).

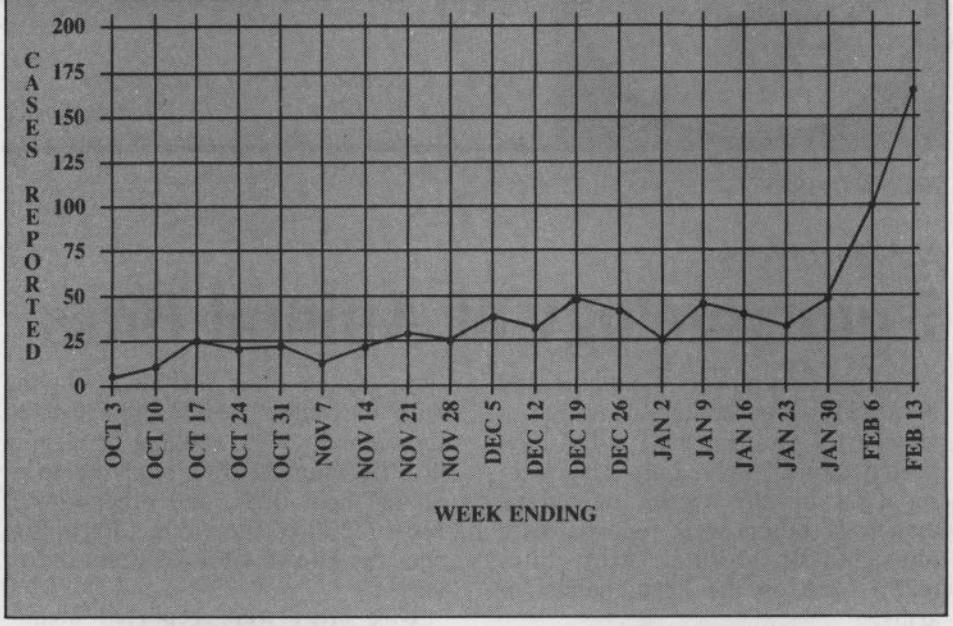


Influenza Outbreak

In late January reports of influenza-like illness began to increase (see Figure). Increases were reported from each HSA region of the Commonwealth. Each of the three information sources monitored by the Division of Epidemiology showed parallel rises: routine case totals from physicians and hospitals, case totals reported by sentinel physicians, and laboratory confirmed influenza cases.

As of February 15 there had been 19 influenza isolates reported in Virginia. All were type A and some had been further characterized as type A(H3N2), consistent with the most prevalent type isolated in surrounding states. One seroconversion to A(H3N2) had also been reported. Based on similarities between the A/Philippines/2/82 component of the current influenza vaccine and the virus strain causing many of the outbreaks in the U.S. and presumably, Virginia, it is likely that most persons vaccinated this season were conferred protection during the outbreak.

Reports of Influenza-like Illness By Sentinel Physicians (N = 30) Virginia, 1984-1985



Hemolytic-Uremic Syndrome Associated with *Escherichia coli* 0157:H7 Enteric Infections

During the first 11 months of 1984, seven cases of hemolytic-uremic syndrome (HUS) associated with *Escherichia coli* 0157:H7 gastroenteritis were identified in the United States. All patients had microangiopathic hemolytic anemia, thrombocytopenia, and evidence of renal disease; none had new onset of neurologic abnormalities to suggest thrombotic thrombocytopenic purpura. A diarrheal illness preceded onset of HUS in all seven patients. The cases occurred in Washington, Nebraska, and North Carolina.

Washington: Three cases occurred between March and October. The first two patients (women ages 25 and 36) had a prodrome of hemorrhagic colitis; the third patient (a 3-year-old boy) had a prodrome of watery, nonbloody diarrhea. *E. coli* 0157:H7 was isolated from the stool of each patient. No exposures common to all patients were identified.

Nebraska: During an outbreak in September of diarrheal illness caused by *E. coli* 0157:H7 among residents of a nursing home, one of the patients with hemorrhagic colitis, a 63-year-old woman, subsequently developed HUS.

North Carolina: During an outbreak of gastroenteritis (both bloody and nonbloody diarrhea) in a day-care center in September and October, three children who had bloody diarrhea subsequently developed HUS; they were 11 months, 31 months, and 35 months of age. *E. coli* 0157:H7 was isolated from the stools of four ill children, including one with HUS.

Editorial Note: *E. coli* 0157:H7 was first recognized as an enteric pathogen during the investigation of two outbreaks of hemorrhagic colitis that occurred in Oregon and Michigan in 1982 (*1*). Since then, *E. coli* 0157:H7 has also been associated with sporadic cases of hemorrhagic colitis and HUS in the United States, Canada, and Great Britain (*2-4*). Isolation of this very rare *E. coli* serotype from stools of patients with HUS suggests that this pathogen may be one important cause of HUS; however, further epidemiologic and laboratory studies are needed.

Since *E. coli* isolates from stool cultures are not routinely serotyped, the diagnosis of *E. coli* 0157:H7 infection cannot be made unless physicians consider it and arrange for serotyping. Stools from HUS patients who present with a diarrheal prodrome should be collected as soon after onset of illness as possible and held frozen at −70 C (−94 F). Arrangements for examination of the stools and/or *E. coli* isolates from such stools at state laboratories or CDC can be made through state laboratory directors.

References

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3. Health and Welfare Canada. Sporadic cases of hemorrhagic colitis associated with *Escherichia coli* 0157:H7—Calgary, Alberta. Canada Diseases Weekly Report 1983;9:181-2.
4. PHLS Communicable Disease Surveillance Centre. Haemolytic uraemic syndrome. Communicable Disease Report 1983;36:1.

Reprinted from MMWR 1985;34:20-1.

Use in the Prevention of Malaria

Adverse Reactions to Fansidar® and Updated Recommendations

Since pyrimethamine-sulfadoxine (Fansidar®) became available in the United States in 1982, it has been an integral part of the malaria prophylaxis regimen that CDC recommends for travelers at risk of exposure to chloroquine-resistant *Plasmodium falciparum* (CRPF). As the areas of the world with transmission of CRPF have expanded, the number of U.S. travelers using Fansidar® has increased. Fansidar® is usually well tolerated; however, as with other sulfonamides, severe adverse reactions associated with its use have been reported (*1-5*). During the past 3 months, additional cases to those reported in the literature of severe cutaneous reactions (erythema multiforme, Stevens-Johnson syndrome, and toxic epidermal necrolysis) associated with the use of Fansidar® over the past 2 years have been reported to CDC. These 10 cases (four fatal) that have occurred among U.S. travelers are currently being investigated by CDC in coordination with the U.S. Food and Drug Administration and the drug manufacturer. In addition, there is a collaborative effort under way to assess the risks associated with the use of this drug for malaria prophylaxis.

Until the risk of adverse reactions to Fansidar® is more thoroughly defined, CDC recommends the following:

1. Chloroquine remains the primary drug of choice for travelers to all malarious areas (*6*).
2. When considering the use of Fansidar® for chemoprophylaxis of CRPF, physicians should carefully question travelers regarding any previous history of sulfonamide intolerance. Fansidar® should not be prescribed if there is any history of previous untoward reaction to sulfonamides.
3. Travelers to CRPF regions in Asia or South America should take Fansidar® in addition to chloroquine only if they stay overnight in rural areas. Travelers visiting urban areas of Asia and South America are at low risk of acquiring malaria, as are travelers to rural areas during daytime hours, because *Anopheles* mosquitoes bite during the evening and nighttime hours.
4. Travelers to areas of east and central Africa where transmissions of CRPF has been documented should continue to use the combination of chloroquine and Fansidar®. The risk of acquiring CRPF in these areas is substantial because of the intense transmission of malaria, especially in those rural areas usually frequented by tourists.
5. Travelers should be advised to discontinue Fansidar® use immediately in the event of a possible ill effect, especially if any mucocutaneous signs or symptoms develop, such as pruritus, erythema, rash, orogenital lesions, or pharyngitis.
6. Travelers should be informed that, regardless of the prophylactic regimen employed, it is still possible to contract malaria. Medical attention should be sought promptly in the event of a febrile illness, and the physician should be advised of the recent travel history and possibility of exposure to malaria.

The above recommendations differ from earlier statements and should be applied as the most current information available (*6-8*). CDC will update these interim malaria chemoprophylaxis recommendations in the near future. Additional cases of adverse reactions to Fansidar® should be reported to the Malaria Branch, Division of Parasitic Diseases, Center for Infectious Diseases, CDC, through the Division of Epidemiology, Virginia Department of Health (804) 786-6261.

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Adapted from MMWR 1985;33:713-4.

Physicians Report DTP Supplies Short

In an effort to determine if private physicians are having difficulty obtaining diphtheria, tetanus, pertussis (DTP) vaccine, 100 randomly selected pediatricians, family physicians and general practitioners were interviewed by phone by state health department personnel.

Survey results indicate that 52 (52%) of the physicians queried are experiencing difficulty in obtaining DTP vaccine. These 52 physicians, when compared with the 48 who are not experiencing difficulty in obtaining DTP vaccine have, on average, smaller inventories of vaccine (7 vs. 14 week supply), and administer more doses of DTP per month (46 vs. 22 doses/mo). Of physicians who are experiencing difficulty, the majority (58%) practice in rural areas, whereas the majority (60%) of those who are not experiencing any difficulty practice in urban areas.

Month: February, 1985

Disease	State				Mean 5 Year To Date	Regions				
	This Month	Last Month	Total to Date 1985	Total to Date 1984		This Month N.W.	N.	S.W.	C.	E.
Measles	0	0	0	1	16	0	0	0	0	0
Mumps	2	4	6	2	15	0	0	1	0	1
Pertussis	1	0	1	5	3	1	0	0	0	0
Rubella	0	0	0	0	2	0	0	0	0	0
Meningitis—Aseptic	19	13	32	27	21	1	0	2	1	15
*Bacterial	42	20	62	48	43	4	2	8	3	25
Hepatitis A (Infectious)	32	19	51	11	32	0	3	27	1	1
B (Serum)	61	51	112	86	78	4	18	12	8	19
Non-A, Non-B	4	12	16	16	11	0	0	3	0	1
Salmonellosis	71	75	146	128	129	15	13	8	12	23
Shigellosis	4	6	10	62	42	1	0	0	3	0
Campylobacter Infections	33	27	60	55	31	7	3	3	7	13
Tuberculosis	27	9	27	45	—	—	—	—	—	—
Syphilis (Primary & Secondary)	24	25	49	73	95	0	4	5	6	9
Gonorrhea	1226	1448	2674	3181	3205	—	—	—	—	—
Rocky Mountain Spotted Fever	0	0	0	0	0	0	0	0	0	0
Rabies in Animals	16	5	21	38	41	11	4	0	1	0
Meningococcal Infections	7	4	11	6	12	1	0	5	0	1
Influenza	210	21	231	431	1053	134	4	17	40	15
Toxic Shock Syndrome	0	0	0	1	1	0	0	0	0	0
Reyes Syndrome	2	0	2	1	2	0	0	0	0	2
Legionellosis	1	1	2	1	2	1	0	0	0	0
Kawasaki's Disease	8	5	13	2	4	0	0	2	2	4
Other:										

Counties Reporting Animal Rabies: Fauquier 1 raccoon; Albemarle 1 skunk; Louisa 1 fox, 1 raccoon; Orange 1 raccoon; Rappahannock 1 raccoon; Shenandoah 3 raccoons, 1 skunk; Spotsylvania 1 skunk; Loudoun 1 raccoon; Prince William 3 raccoons; Hanover 1 raccoon.

Occupational Illnesses: Pneumoconiosis 26; Silicosis 16; Carpal tunnel syndrome 11; Asbestosis 7; Hearing loss 6; Poisoning, lead 3; Dermatoses 1.

*other than meningococcal

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