## Janice Charles, Salma Fahridin, Helena Britt

Australian GP Statistics & Classification Centre, University of Sydney, New South Wales.



# **Bites and stings**

Between April 2007 and March 2009, bites and stings were managed by general practitioners at just over two contacts per 1000 encounters in the BEACH (Bettering the Evaluation and Care of Health) program, (extrapolating to about 240 000 times per year nationally). Included in this analysis are insect and animal bites, infected bites, and insect and aquatic animal stings.

### Table 1. Bites and stings managed

Problem managed	n	% of bites
Insect bite unspecified	175	41.1
Dog bite	44	10.3
Infected insect bite	38	8.9
Spider bite	31	7.3
Bee sting	25	5.9
Bite unspecified	22	5.2
Infected bite	18	4.2
Mosquito bite	15	3.5
Animal bite unspecified	14	3.3
Infected dog bite	8	1.9
Other bites and stings	36	8.4

#### Table 2. Management of bites

Insect bites (n=312)	Per 100 bites/stings managed
Medications	92.3
Cephalexin	11.9
Loratadine	8.7
Mometasone	7.7
Hydrocortisone topical	7.4
Other treatments	24.7
Advice/reassurance	17.9
Animal/other bites (n=114)	
Medications	104.4
Diphtheria/tetanus vaccine	30.7
Cephalexin	18.4
Amoxycillin/potassium clavulanate	15.8
Roxithromycin	3.5
Other treatments	75.4
Injection	26.3
Dressing	20.2

■ Of the 426 bite or sting problems managed, 312 (73%) were caused by insects. There were 114 other types of bites recorded, the most common being dog and spider bites. There were five cases of toxicity from aquatic animal stings or adverse reactions to bee stings (*Table 1*).

Bites and stings were managed significantly more often for children aged 1–4 years, recording the highest rate of almost eight per 1000 encounters with this group. Children aged 5–14 years were managed for bites at five per 1000 encounters, more than double the average rate. There were more children in these age groups managed for insect bites than for animal or other bites, which tended to be spread more evenly across age groups. Patients aged 15–24 years also had higher than average rates of all bites managed, but the rate then dropped significantly for patients aged 25 years and over. There was no difference in management rates between males and females.

Insect bites were most commonly managed with medications. Topical corticosteroids were the most common drug group prescribed, followed by antibiotics and antihistamines. Among individual medications prescribed, supplied or advised for insect bites, cephalexin was the most frequently recorded. Other treatments provided were mainly advice and reassurance (*Table 2*). Animal/ other bites were managed with high levels of medications and other treatments. Antibiotics accounted for two-thirds of prescribed medications; the remaining third was made up of vaccines, antihistamines, corticosteroids and analgesics. The most common medication prescribed, supplied or advised for animal/other bites was diphtheria/tetanus vaccine. Other treatments were mainly procedural with high rates of injections and dressings of wounds (*Table 2*).

Conflict of interest: none declared.

# **Acknowledgments**

The authors thank the GP participants in the BEACH program and all members of the BEACH team. Financial contributors to BEACH between 2007 and 2009: Australian Government Department of Health and Ageing; Australian Institute of Health and Welfare; National Prescribing Service; AstraZeneca Pty Ltd (Aust); Janssen-Cilag Pty Ltd; Merck, Sharp & Dohme (Aust) Pty Ltd; Pfizer Australia; Abbott Australasia; Sanofi-Aventis Australia Pty Ltd; Wyeth Australia Pty Ltd.

