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### **233. The Circumstances Surrounding Snakebite in the United States: A Survey of Surreptitious Serpent-Person Skirmishes**

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**Background:** In 2013, the ToxIC North American Snakebite Registry (NASBR) began collecting detailed prospective information regarding characteristics of North American snakebites. Published studies from this registry demonstrate an increased prevalence of snakebite in men, but the activities surrounding the bite have not been examined at a granular level. The objective of the study was to describe the circumstances at the time of a snake bite in patients reported to NASBR.

**Methods:** This was a secondary data analysis of cases reported to the NASBR between 2013 and 2021. A standardized data collection tool was utilized to extract variables of interest, which included age, sex, calendar month of bite, type of snake involved, location where bite occurred and circumstances surrounding the bite (entered as free text by investigators). These circumstances were divided into eight major categories defined by the authors, which included “hobbies”, “chores,” “sports and recreation,” “water-related,” “vehicle-related,” “dog-related,” “other animal related” (which included intentional interactions with the snake), and “other activities” which were assigned based on review of the case narrative and agreed upon by authors. These categories were further divided into more specific subcategories.

**Results:** Of 1249 snakebites with circumstances reported, the most common activities were sports and recreational (n . 368; 29.5%), hobbies (n . 181; 14.5%), and other animal-related activities (n . 169; 13.5%). Of sports and recreational activities, “walking” (228/368; 62%) and “hiking” (62/368; 16.8%) were most common. “Playing” and “gardening” were the most common hobbies, and taking out trash and yardwork were the most common chores. For cases in other situational categories, the majority of dog-related cases involved walking a dog when bitten by the snake (24/36; 66.7%), and most vehicle-related activities described the patient stepping in or out of a car when bitten (21/32; 65.6%). Of the 1249 cases, 39 described the patient attempting a “Good Samaritan” activity, which included trying to save a human (n . 8/39; 20.5%), save a pet (n .11/38; 28.2%) or save the snake (n . 10/38; 25.6%). 59 of the 1249 total cases (4.7%) describe the patient reaching into a blind space when the snakebite occurred. In 86/1249 cases (6.9%) the patient reported a history of ethanol consumption in the 4 hours preceding the snakebite, and 129/1249 cases (10.3%) involved recreational or illicit drug use. Comparing intentional (n . 178) and unintentional (n . 1071) snake-human interactions, most intentional interactions resulted in upper extremity bites (167/178; 93.8%) and all nonnative snakebites were intentional interactions. Indoor and outdoor locations where snakebites occurred were also recorded.

**Conclusion:** The majority of cases involved unintentional interactions with snakes in adult patients. Over

50% were associated with everyday activities (sports and recreation, hobbies, chores). Drugs or alcohol were involved in a minority of cases.