Supplementary Table S2—Frequency distribution of participant responses to attitude items from the veterinary personnel survey, Alaska (n=31).

Question	Answer options	n (%)
I am confident that my knowledge about ticks and tick-borne disease is current	Strongly agree	0 (0.0)
	Agree	5 (16.1)
	Neutral/undecided	8 (25.8)
	Disagree	10 (32.3)
	Strongly disagree	8 (25.8)
Ticks are a concern for dogs and cats living in Alaska	Strongly agree	2 (6.5)
	Agree	19 (61.3)
	Neutral/undecided	8 (25.8)
	Disagree	2 (6.5)
	Strongly disagree	0 (0.0)
Tick-borne diseases are a concern for dogs and cats living in Alaska	Strongly agree	0 (0.0)
	Agree	21 (67.7)
	Neutral/undecided	6 (19.4)
	Disagree	4 (12.9)
	Strongly disagree	0 (0.0)
Dogs and cats living in Alaska should be screened for ticks during routine vet visits	Strongly agree	5 (16.1)
	Agree	19 (61.3)
	Neutral/undecided	7 (22.6)
	Disagree	0 (0.0)
	Strongly disagree	0 (0.0)
Most dogs and cats living in Alaska would benefit from tick-prevention for some or all of the year	Strongly agree	6 (19.4)
	Agree	9 (29.0)
	Neutral/undecided	8 (25.8)
	Disagree	8 (25.8)
	Strongly disagree	0 (0.0)
Most dogs and cats traveling out of Alaska would benefit from tick protection	Strongly agree	21 (69.7)
	Agree	9 (29.0)
	Neutral/undecided	1 (3.2)
	Disagree	0 (0.0)
	Strongly disagree	0 (0.0)
Veterinary clinics are an important source of information for pet owners about ticks and tick-borne diseases	Strongly agree	22 (71.0)
	Agree	9 (29.0)
	Neutral/undecided	0 (0.0)
	Disagree	0 (0.0)
	Strongly disagree	0 (0.0)

At work, I play an important role in tick prevention and education	Strongly agree	6 (19.4)
	Agree	14 (45.2)
	Neutral/undecided	8 (25.8)
	Disagree	2 (6.5)
	Strongly disagree	1 (3.2)

Supplementary Table S3—Frequency distribution of participant responses to practice items from the veterinary personnel survey, Alaska (n=31).

Question	Answer options	n (%)
I interact with clients during work	Very frequently	17 (54.8)
	Frequently	12 (38.7)
	Occasionally	1 (3.2)
	Rarely	1 (3.2)
	Never	0 (0.0)
I submit found ticks to the Alaska Submit-A-Tick Program	Very frequently	3 (9.7)
	Frequently	1 (3.2)
	Occasionally	8 (25.8)
	Rarely	6 (19.4)
	Never	13 (41.9)
I recommend tick-prevention for dogs and cats that live in Alaska and spend time outside	Very frequently	3 (9.7)
	Frequently	11 (35.5)
	Occasionally	5 (16.1)
	Rarely	8 (25.8)
	Never	4 (12.9)
I recommend tick prevention for dogs and cats traveling outside of Alaska	Very frequently	23 (74.2)
	Frequently	5 (16.1)
	Occasionally	2 (6.5)
	Rarely	0 (0.0)
	Never	1 (3.2)
I teach clients how to check their pets for ticks	Very frequently	0 (0.0)
	Frequently	0 (0.0)
	Occasionally	6 (19.4)
	Rarely	8 (25.8)
	Never	17 (54.8)
I answer client questions about ticks and tick-borne disease	Very frequently	0 (0.0)
	Frequently	3 (9.7)
	Occasionally	10 (32.3)
	Rarely	13 (41.9)
	Never	5 (16.1)
I provide clients with brochures, handouts, and other materials about ticks and tick-borne disease	Very frequently	0 (0.0)
	Frequently	1 (3.2)
	Occasionally	8 (25.8)
	Rarely	14 (45.2)

	Never	8 (25.8)
I use outreach materials from the Alaska Submit-A-Tick Program	Very frequently	0 (0.0)
	Frequently	1 (3.2)
	Occasionally	3 (9.7)
	Rarely	10 (32.3)
	Never	17 (54.8)
I have sought out information about ticks or tick-borne disease in the past year	Very frequently	1 (3.2)
	Frequently	2 (6.5)
	Occasionally	9 (29.0)
	Rarely	11 (35.5)
	Never	8 (25.8)
Which of the following have you used to get information about ticks or tick-borne diseases?[a]	The Centers for Disease Control and Prevention website	9 (32.1)
	The Alaska State Veterinary Medical Association website	5 (17.9)
	The Office of the State Veterinarian	7 (25.0)
	Alaska Department of Fish and Game	11 (39.3)
	Social Media	0 (0.0)
	Friends and family members	0 (0.0)
	Veterinary textbooks	16 (57.1)
	Tick and tick-borne disease awareness campaigns	3 (10.7)
	Conventions and other events	3 (10.7)
	Colleagues, coworkers, or peers	10 (35.7)
	Veterinary pharmaceutical sales representatives	3 (10.7)
	Other	6 (21.4)

a. Subset of the survey population (n=28)

Supplementary Table S4—Frequency distribution of participant responses to items from the pet owner survey, Alaska (n=81). Correct responses are italicized.

Question	Answer options	n (%)
Knowledge		
Do we have ticks native to Alaska?	*Yes*	19 (23.5)
	No	23 (28.4)
	Unsure	39 (48.1)
How capable do you think ticks are of over-wintering in Alaska?	*Very capable*	7 (8.6)
	Capable	34 (42.0)
	Not capable	40 (49.4)
Why are ticks a problem for people and pets? (Check all that apply):	*They can transmit diseases*	76 (93.8)
	They can cause paralysis	43 (53.1)
	They can cause anemia	50 (61.7)
	They can cause irritation at the bite site	55 (67.9)
	Ticks are not a problem for pets	4 (4.9)
	Ticks are not a problem for people	3 (3.7)
Attitudes		
How likely do you think your pet is to pick up a tick on a walk or a hike in Alaska?	Very likely	0 (0.0)
	Likely	1 (1.2)
	Possibly	20 (24.7)
	Not likely	26 (32.1)
	Very unlikely	34 (42.0)
How often do you worry about fleas, ticks, or other parasites on your pets in Alaska?	Regularly	1 (1.2)
	Often	10 (12.3)
	Sometimes	18 (22.2)
	Rarely	23 (28.4)
	Never	29 (35.8)
How concerning do you think ticks currently are in Alaska?	Very concerning	6 (7.4)
	Somewhat concerning	20 (24.7)
	Neutral	16 (19.8)
	Somewhat unconcerning	18 (22.2)
	Not concerning at all	21 (25.9)
How do you think your concern about ticks will change in the next 5 years?	Will become more concerned	43 (53.1)
	Will become less concerned	3 (3.7)
	Will not change	35 (43.2)
Practices		
Is your pet currently on a flea and tick preventative (topical or oral -	Yes	11 (13.6)

ex: Frontline, K9 Advantix, Credelio, Bravecto)?	No	67 (82.7)
	Not sure	3 (3.7)
Do you know how to check your pet for ticks?	Yes	50 (61.7)
	No	31 (38.3)
How often do you check your pet for ticks?[a]	Often (daily)	2 (2.6)
	Sometimes (weekly or monthly)	11 (14.3)
	Rarely (A few times per year)	27 (35.1)
	Never	37 (48.1)

a. Subset of the survey population (n=77)

Supplementary Table S1—Frequency distribution of participant responses to knowledge items from the veterinary personnel survey, Alaska (n=31). Correct responses are italicized.

Question	Answer options	n (%)
Which of the following can be parasitized by ticks?	*Mammals*	29 (93.5)
	Birds	25 (80.6)
	Amphibians	9 (29.0)
	Reptiles	11 (35.5)
	Do not know	2 (6.5)
Typical size of nymphal ticks?	A grain of sand (0.5 mm)	7 (22.6)
	Poppy seed (1.5 mm)	9 (29.0)
	Sesame seed (3 mm)	8 (17.4)
	Lentil (5 mm)	3 (9.7)
	Do not know	5 (16.1)
Where would a person or pet most likely encounter ticks?	*Wooded areas and forest edges*	28 (90.3)
	Leaf litter	18 (58.1)
	Tall grass	26 (83.9)
	Manicured lawns	8 (25.8)
	Buildings	2 (6.5)
	Do not know	0 (0.0)
Are there local populations of ticks in Alaska?	*Yes*	20 (64.5)
	No	4 (12.9)
	Do not know	7 (22.6)
Does Alaska have a passive tick surveillance program?	*Yes*	19 (61.3)
	No	0 (0.0)
	Do not know	12 (38.7)
Most cases of Anaplasmosis occur in the following areas of the United States:	*Northeast*	10 (32.3)
	Upper Midwest	6 (19.4)
	South Central	8 (25.8)
	West Coast	3 (9.7)
	Southeast	7 (22.6)
	Hawaii	1 (3.2)
	Alaska	1 (3.2)
	Do not know	15 (48.4)
Most cases of Ehrlichiosis occur in the following areas of the United States:	Northeast	7 (22.6)
	Upper Midwest	8 (25.8)
	South Central	12 (38.7)
	West Coast	3 (9.7)
	Southeast	9 (29.0)

	Hawaii	1 (3.2)
	Alaska	1 (3.2)
	Do not know	14 (45.2)
Most cases of Lyme disease occur in the following areas of the United States:	*Northeast*	18 (58.1)
	Upper Midwest	7 (22.6)
	South Central	4 (12.9)
	West Coast	5 (16.1)
	Southeast	8 (25.8)
	Hawaii	1 (3.2)
	Alaska	1 (3.2)
	Do not know	9 (29.0)
Approximately how long must a tick be attached in a host for Borrelia burgdorferi (the pathogen that causes Lyme disease) to be transmitted[a]	1-2 hours	7 (23.3)
	2-10 hours	3 (10.0)
	10-24 hours	2 (6.7)
	At least 24 hours	7 (23.3)
	More than 48 hours	1 (3.3)
	Do not know	10 (33.3)
Which of the following are symptoms of Lyme disease in a dog?	*Fever*	28 (90.3)
	Loss of appetite	25 (80.6)
	Joint swelling	26 (83.9)
	Lameness	28 (90.3)
	Decreased activity	27 (87.1)
	Do not know	2 (4.3)
Do you know how tularemia is transmitted?	Yes	11 (35.5)
	No	12 (38.7)
	Do not know	8 (25.8)
Select all typical transmission routes of tularemia[b]	*Contact with infected animal carcasses*	11 (100.0)
	Consumption of unpasteurized milk	1 (9.1)
	Being bitten by an infected mosquito	0 (0)
	Being bitten by an infected tick	8 (72.7)
	Drinking contaminated water	4 (36.4)
	Breathing in aerosolized feces, urine, or body fluids of infected rodents	6 (54.5)
	Close contact with an individual who has tularemia	2 (18.2)

a. Missing response (n=30)
b. Only offered to participants who responded yes to the previous question; Subset of the survey population (n=11)