



## Ticks<sup>1</sup>

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Several species of ticks attack dogs, but cats are rarely infested. Many of the dog ticks are known as wood ticks and infest dogs when they run through the woods or fields. Ticks can also annoy people but humans are not the preferred host.

Ticks are not insects, and are closely related to the spiders. Adult ticks have eight legs. All ticks are parasitic, feeding on the blood of animals.

Of the ticks found in Florida, the brown dog tick, and the American dog tick, are the most troublesome. The brown dog tick rarely bites humans, but infestations are frequently found on dogs and in the home. The American dog tick attacks a wide variety of hosts, including humans, but rarely will infest homes.

### Brown Dog Tick

The brown dog tick (Figure 1) seldom attacks animals other than dogs. It is most likely found where dogs are kept in or around the house. The brown dog tick is not known to transmit diseases to humans but may transmit disease among dogs.

The adult female tick lays a mass of 1000-3000 eggs after engorging on a dog's blood. These eggs

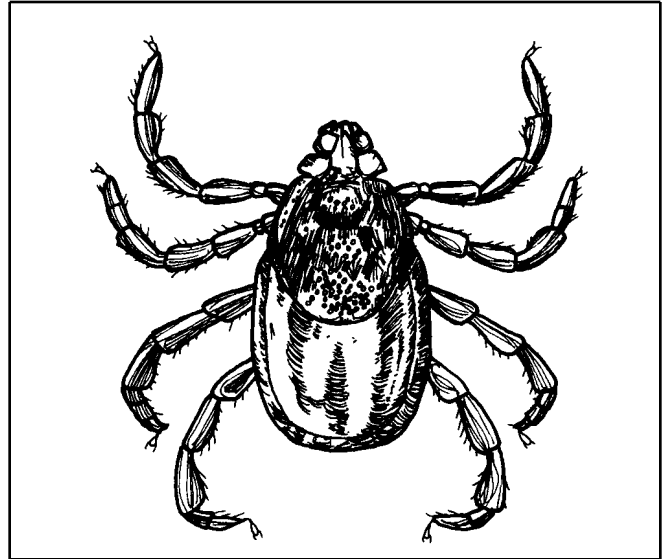


Figure 1. Brown dog tick.

are often found in cracks on the roof of kennels or high on the walls or ceilings of buildings. In the house, eggs are laid around baseboards, window and door casings, curtains, furniture, and edges of rugs. The egg-laying females are often seen going up walls to lay eggs.

The eggs hatch in 19-60 days into a six-legged, small seed tick. The seed tick takes a blood meal from dogs when they are available. The larvae are so small they won't be noticed on the dog unless a

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number are together. The seed tick remains attached for 3-6 days, turns bluish in color, and then drops to the floor. After dropping from the host, the seed tick hides for 6-23 days before molting into an eight-legged, reddish-brown nymph. It is now ready for another blood meal and again seeks a dog host. The nymphs attach to dogs, drop off, and molt to the adult in 12-29 days. As a reddish-brown adult, it again seeks a blood meal, becomes engorged, and is bluish in color, reaching about 1/3 inch in length.

Unengorged larvae, nymphs, and adults may live for long periods of time without a blood meal. Adults have been known to live for as long as 200 days without a blood meal. Indoors, ticks hiding between blood meals may be found behind baseboards, window casings, window curtains, bookcases, inside upholstered furniture, and under edges of rugs. Outdoors, ticks hide near foundations of buildings, in crevices of siding, or beneath the porch.

### American Dog Tick

The American dog tick (Figure 2), is also a common pest of pets and humans in Florida. The adult males and females are frequently encountered by sportsmen and people who work outdoors. Dogs are the preferred host, although the American dog tick will feed on other warmblooded animals. The nymphal stages of the American dog tick usually only attack rodents. For this reason the American dog tick is not considered a household pest.

The female dog tick lays 4000-6500 eggs and then dies. The eggs hatch into seed ticks in 36-57 days. The unfed larvae crawl in search of a host and can live 540 days without food. When a small rodent is found, the larvae attach and feed for approximately 5 days. The larvae then drop off the host and molt to the nymphal stage. The nymphs crawl about in search of a rodent host, attach to a suitable host, and engorge with blood in 3-11 days. Nymphs can live without food for up to 584 days.

Adults crawl about in search of dogs or large animals for a blood meal. Adults can live for up to 2 years without food. American dog tick adults and many other species can be found along roads, paths, and trails, on grass, and on other low vegetation in a "waiting position." As an animal passes by the tick

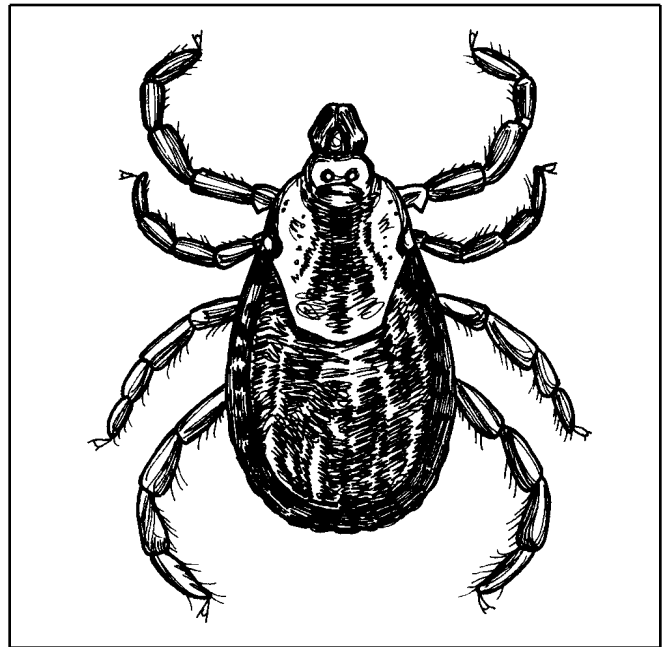


Figure 2. American dog tick.

will grasp it firmly and soon start feeding on its host. The males remain on the host for an indefinite period of time alternately feeding and mating. The females feed, mate, become engorged, and then drop off to lay their eggs.

The American dog tick requires from 3 months to 3 years to complete a life cycle (Figure 3). It is typically an outdoor tick and is dependent on climatic and environmental conditions for its eggs to hatch.

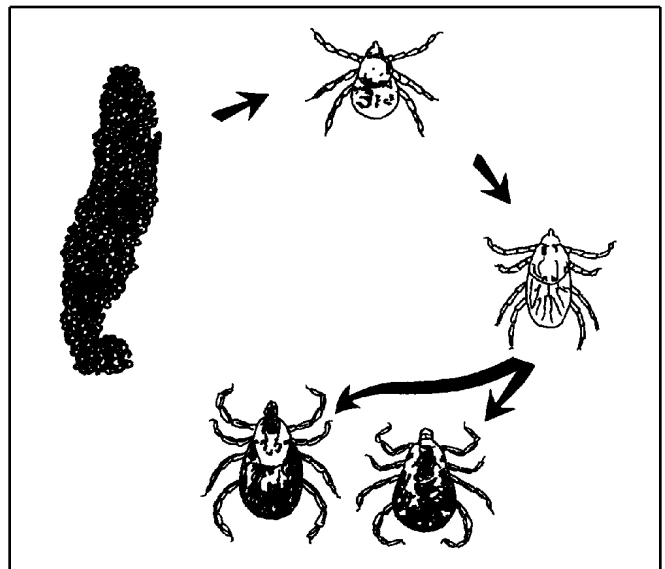


Figure 3. American dog tick life cycle.

## Importance of Ticks

When feeding, ticks make a small hole in the skin, attach themselves with a modification of one of the mouthparts which has teeth that curve backwards, and insert barbed piercing mouthparts to remove blood.

The presence of ticks is annoying to dogs and humans. Heavy continuous infestations on dogs cause irritation and loss of vitality. Pulling ticks off the host may leave a running wound which may become infected because of their type of attachment.

The brown dog tick is not a vector of human disease, but it is capable of transmitting canine piroplasmiasis among dogs.

The American dog tick may carry Rocky Mountain spotted fever, tularemia, and other diseases from animals to people. Dogs are not affected by these diseases, but people have become infected by picking ticks from dogs. People living in areas where these wood ticks occur should inspect themselves several times a day. Early removal is important since disease organisms are not transferred until the tick has fed for several hours.

The American dog tick is also known to cause paralysis in dogs and children where ticks attach at the base of the skull or along the spinal column. Paralysis is caused by a toxic secretion produced by the feeding tick. When the tick is removed, recovery is rapid, usually within 8 hours. Sensitized animals may become paralyzed by tick attachment anywhere on the body.

Lyme disease is transmitted by ticks, but few cases have been reported in Florida. Most transmission occurs in the New England states, and the primary vector is the deer tick. The deer tick is not prevalent in Florida, but species that are close relatives and are capable of transmitting Lyme disease are common throughout the state. The American dog tick and the brown dog tick are not considered important vectors of Lyme disease. In cases of tick bites where Lyme disease is suspected, a physician should be contacted so that appropriate blood tests can be done for the patient.

## Control

Ticks should be removed from pets and humans as soon as they are noticed. Ticks should be removed carefully and slowly. If the attached tick is broken, the mouthparts left in the skin may transmit disease or cause secondary infection. Ticks should be grasped with tweezers at the point where their mouthparts enter the skin and pulled straight out with firm pressure. A small amount of flesh should be seen attached to the mouthparts after the tick is removed.

Pesticidal control of ticks may require both pet treatment and treatment of the infested area. If a heavy tick infestation occurs it is necessary to treat pets, home, and yard at the same time.

Pets should be treated by using dusts, dip or sprays. Rub dusts into the fur to the skin being careful not to allow chemicals to get into the eyes, nose, or mouth. Heavy infestations of ticks on the animal should be controlled by spraying or dipping.

Premise sprays are registered for tick control. Read the label thoroughly to be certain that the site of application (lawn, house, crawl space, kennels, etc.) is on the label.

Brown dog tick infestations of homes and yards are frequently difficult to control. Insecticides should be applied inside the house carefully as light, spot treatments to areas where ticks are known to be hiding. Special effort should be given in treating areas frequented by pets. Applications at 2-4 week intervals may be necessary to eliminate the ticks. Pets should be kept off treated surfaces until dry.

People entering tick infested areas should keep clothing buttoned, shirts inside trousers, and trousers inside boots. Do not sit on the ground or on logs in bushy areas. Keep brush cleared or burned along frequently traveled areas. Repellents will protect exposed skin. However, ticks will crawl over treated skin to untreated parts of the body.

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
<b>Aero-cide Contact Insecticide (Aerosol)</b>		<b>Pyrethrins + d-trans Allethrin + Piperonyl Butoxide + MGK264 - 1.0 + 1.0 + 4.0 + 4.0%</b>		
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	2 hours	None	None
Direct spray toward pet beds and resting quarters. Treat adjacent cracks and other areas where females may crawl to lay eggs. Volumetric treatment of voids -- attics, crawl spaces, false ceilings. Calculate void volume and treat.				
<b>Food Areas of Food Handling Establishments</b>	Brown Dog Ticks, Lone Star Ticks	2 hours	None	None
Use this product with supplied actuator and tubes. Do not remain in treated area and ventilate the treated area after treatment is completed. Treated room should be ventilated for 2 hours after spraying. Direct spray toward pet beds and resting quarters. Treat adjacent cracks and other areas where females may crawl to lay eggs. Volumetric treatment of voids-- attics, crawl spaces, false ceilings. Calculate void volume and treat.				
<b>Bio-Spot Flea and Tick Control for Dogs (Pour-on)</b>		<b>Permethrin - 45.0%</b>		
<b>Dogs</b>	Ticks	None	None	None
For external use on adult dogs only. Do not use on dogs less than 6 months of age. Do not use on sick, aged, medicated, pregnant or nursing dogs without consulting a veterinarian. Apply 1 tube of solution (dogs less than 33 lbs) to the dog's back between the shoulder blades. Apply 1 tube of solution to the dog's back between the shoulder blades and apply a second tube to the dog's back directly in front of the tail (dogs more than 33 lbs). Some animals may be sensitive to this product.				
<b>Conquer (Emulsifiable concentrate)</b>		<b>Esfenvalerate - 3.48%</b>		
<b>Apartments/Houses/Dwellings/Structures/Garages</b>	Brown Dog Ticks	Do not contact until dry	None	14 days
Apply as a coarse wet spray to surfaces where these pests are normally found. Pay particular attention to cracks, crevices and similar protected locations in floors and walls. Spray directly on insects when possible. Do not apply this spray to surfaces or utensils that may come into contact with food. Prior to treatment, aquariums and fish bowls should be covered and birds, such as canaries, removed from the area. Do not spray pets.				
<b>Hotels/Motels, Office Buildings, Theaters</b>	Brown Dog Ticks	Do not contact until dry	None	None
Apply as a coarse wet spray to surfaces where these pests are normally found. Pay particular attention to cracks, crevices and similar protected locations in floors and walls. Spray directly on insects when possible. Do not apply this spray to surfaces or utensils that may come into contact with food. Prior to treatment, aquariums and fish bowls should be covered and birds, such as canaries, removed from the area. Do not spray pets.				

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Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
<b>Hospitals, Schools, Railroad Cars/Box Cars/Trains, Trucks/Trailers</b>	Brown Dog Ticks	Do not contact until dry	None	None
Apply as a coarse wet spray to surfaces where these pests are normally found. Pay particular attention to cracks, crevices and similar protected locations in floors and walls. Spray directly on insects when possible. Do not apply this spray to surfaces or utensils that may come into contact with food. Prior to treatment, aquariums and fish bowls should be covered and birds, such as canaries, removed from the area. Do not spray pets.				
<b>Building Perimeter (soil 6-10 feet)</b>	Ticks	Do not contact until dry	None	7 days
For best results, lawn should be mowed a day or two before spraying. Spray using a slow, even sweeping motion, being sure to cover the entire lawn surface where the pets will normally frequent. Spray under ornamentals and trees, but avoid soaking young or flowering plants. Repeat treatments may be necessary at 7 to 14 day intervals. Treat a 12-18 inch band of soil and other substrate adjacent to buildings and the building foundation to a height of 2 to 3 feet where these pests are active and may find entrance.				
<b>Cynoff EC Insecticide (Emulsifiable concentrate)</b>		<b>Cypermethrin - 24.8%</b>		
<b>Structures, Apartments/Houses/ Dwellings/Structures/ Garages</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
For residual pest control in and on buildings and structures and their immediate surroundings and on modes of transport. Do not use in food/feed areas of food handling establishments. Do not apply this product to soil in crawl spaces. Protect aquariums from spray mist. Do not use this product with oil (except for cluster fly control). Wear impermeable gloves made of neoprene when spraying.				
<b>Outdoor &amp; Perimeter</b>	Ticks	None	None	None
Apply to surfaces of buildings, porches, screens, window frames, eaves, patios, lawns, vegetation, refuse dumps, garages and in other areas where pests are found. Wear impermeable gloves made of neoprene when spraying.				
<b>Cynoff WP Insecticide (Wettable/soluble powder)</b>		<b>Cypermethrin - 40.0%</b>		
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
For residual pest control in and on buildings and structures and their immediate surroundings and on modes of transport. This product is not labeled for use in food areas of food/feed handling establishments. Do not use in electrical equipment because of possible shock hazard. Do not use this product with oil. Protect aquariums from spray mist.				
<b>Outdoor &amp; Perimeter</b>	Ticks	Do not contact until dry	None	None

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
Apply as a residual spray to surfaces of buildings, porches, screens, window frames, eaves, patios, lawns, refuse dumps, garages and other areas where pests are found.				
<b>Cytec Crack and Crevice Pressurized Residual (Aerosol)</b>		<b>Cyfluthrin - 0.10%</b>		
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	None	None	None
Use this product with supplied actuator and injection tubes. Inject product into cracks and crevices and void spaces where insects may be harboring, living, and breeding. Thoroughly treat infested and egg laying sites near pet resting areas				
<b>Outdoor &amp; Perimeter</b>	Ticks	None	None	None
Inject product into cracks and crevices where insects may enter structure or harbor.				
<b>DeltaDust (Dust)</b>		<b>Deltamethrin - 0.05%</b>		
<b>Outdoor &amp; Perimeter</b>	Ticks	None	None	None
Make residual treatment around windows and doors, porches, screens, eaves, patios, garages, understairways, in crawl spaces and other areas where pests hide.				
<b>DeltaGard G (Granule)</b>		<b>Deltamethrin - 0.1%</b>		
<b>Outdoor &amp; Perimeter</b>	Ticks	Do not contact until dry	None	None
Apply this product uniformly to home lawns, shrubbery, and other ornamental recreational grassy areas. Immediately after application, water the lawn thoroughly with half an inch of water. Retreat as necessary. Do not apply to saturated soil. Do not allow children or pets onto treated areas until granules have been watered into the soil and the grass or soil is dry.				
<b>Demand CS (Microcapsulated suspension)</b>		<b>Lambda-cyhalothrin - 9.7%</b>		
<b>Animal Housing</b>	Ticks	Do not contact until dry	None	3 weeks
Do not apply when animals are present. Do not apply to animal feedstuffs, water, or watering equipment. Do not contaminate any animal food, feed, or water in and around livestock, poultry, or pet housing when making applications.				
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	3 weeks
For dilution with water for application using hand-held or power-operated application equipment. Can be applied as a coarse spray for general, spot, or crack and crevice application.				
<b>General Structures, Hotels/Motels</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	3 weeks

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
For use as a general surface spray and crack and crevice or spot treatment in, on, or around buildings and structures and their immediate surroundings.				
<b>Meat &amp; Poultry Plants (Non-edible areas)</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	3 weeks
For dilution with water for application using hand-held or power-operated application equipment. Can be applied as a coarse spray for general, spot, or crack and crevice application.				
<b>Food Areas of Food Handling Establishments</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	3 weeks
For dilution with water for application using hand-held or power-operated application equipment. Can be applied as a coarse spray for general, spot, or crack and crevice application. Application of this product in food areas and food serving areas other than as a spot and/or crack and crevice treatment is not permitted.				
<b>Meat Plants</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	3 weeks
For dilution with water for application using hand-held or power-operated application equipment. Can be applied as a coarse spray for general, spot, or crack and crevice application. Authorized for use in meat, poultry, and egg processing facilities as a crack and crevice or spot treatment.				
<b>Poultry Plants</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	3 weeks
For dilution with water for application using hand-held or power-operated application equipment. Can be applied as a coarse spray for general, spot, or crack and crevice application. Authorized for use in meat, poultry, and egg processing facilities as a crack and crevice treatment.				
<b>Shell Egg Grading and Egg Products Grading Facilities</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	3 weeks
For dilution with water for application using hand-held or power-operated application equipment. Can be applied as a coarse spray for general, spot, or crack and crevice application. Authorized for use in meat, poultry, and egg processing facilities as a crack and crevice treatment.				
<b>Building Exteriors</b>	Ticks	None	None	3 weeks
<b>Demon EC (Emulsifiable concentrate)</b>		<b>Cypermethrin - 25.3%</b>		
<b>Building Exteriors</b>	Ticks	Do not contact until dry	None	None
Barrier Treatment: Apply to band of soil and vegetation 6-10 feet wide around the foundation of structure. Also treat foundation to a height of 2-3 feet. Retreat as necessary to maintain effectiveness. Apply as a residual treatment to outside surfaces of buildings.				

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
<b>Demon TC (Emulsifiable concentrate)</b>		<b>Cypermethrin - 25.3%</b>		
<b>Building Exteriors</b>	Ticks	None	None	None
Do not apply more than 1 pound of material per acre per year. Apply to a band of soil and vegetation 6-10 ft wide around and adjacent to the structure. Also, treat foundation to a height of 2-3 feet.				
<b>Dumps/Landfills/Garbage Areas</b>	Ticks	None	None	None
Do not apply more than 1 pound of material per acre per year.				
<b>Demon WP (Wettable/soluble powder)</b>		<b>Cypermethrin - 40.0%</b>		
<b>General Structures</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Do not use as a space spray. Use only in well-ventilated areas.				
<b>Commercial Warehouses/Industrial Buildings/Storage Buildings, Buses/Automobiles</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
<b>Food Processing (non-food/feed areas), Beverage/Bottling Plants/Breweries</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Do not use as a space spray. Use only in well-ventilated areas. Not labeled for use in food areas of food handling establishments. Authorized by USDA for use in federally inspected meat, poultry, and egg processing and servicing establishments.				
<b>Food Storage Areas (warehouses)</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Do not apply to warehouses while raw agricultural commodities for food or feed are being stored. Do not use as a space spray. Use only in well-ventilated areas. Not labeled for use in food areas of food handling establishments. Authorized by USDA for use in federally inspected meat, poultry, and egg processing and servicing establishments.				
<b>Tobacco Processing</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Do not use in warehouses where raw or cured tobacco is stored.				
<b>Hospitals</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
Do not apply in any rooms when patients, the elderly or the infirm are actively using the room for sleeping.				
<b>Nursing Homes</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Do not apply in any rooms when patients, the elderly, or the infirm are actively using the room for sleeping, convalescing, eating, or other similar activities.				
<b>Schools</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Do not apply to classrooms when in use.				
<b>Vehicles/Transportation</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Do not use as a space spray. Use only in well-ventilated areas.				
<b>Aircraft</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Do not apply to aircraft cabins.				
<b>Building Exteriors</b>	Ticks	Do not contact until dry	None	None
Apply as a residual spray to surfaces of buildings. Barrier treatment: Apply to a band of soil and vegetation 6-10 feet around and adjacent to the foundation to a height of 2-3 feet.				
<b>Demon WP Water Soluble Packets (Wettable/soluble powder)</b>		<b>Cypermethrin - 35.6%</b>		
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Do not use as a space spray. Use only in well ventilated areas.				
<b>Commercial Warehouses/Industrial Buildings/Storage Buildings</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Do not use as a space spray. Use only in well ventilated areas. Do not use in warehouses while raw agricultural commodities for food or feed are being stored. Do not use in warehouses where raw or cured tobacco is stored.				
<b>Mills/Granaries/Seed Houses/Grain Elevators</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
Do not use as a space spray. Use only in well ventilated areas. Do not use in warehouses while raw agricultural commodities for food or feed are being stored.				
<b>Tobacco Processing</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Do not use as a space spray. Use only in well ventilated areas. Do not use in warehouses where raw or cured tobacco is stored.				
<b>Sensitive Environments</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Do not use as a space spray. Use only in well ventilated areas. Do not use in rooms which are in use.				
<b>Building Exteriors</b>	Ticks	Do not contact until dry	None	None
Apply as a residual spray to surfaces of buildings. Barrier treatment: Apply to a band of soil and vegetation 6-10 feet wide around and adjacent to the building. Also, treat the building foundation to a height of 2-3 feet.				
<b>Dragnet FT (Emulsifiable concentrate)</b>		<b>Permethrin - 36.8%</b>		
<b>Structures</b>	Brown Dog Ticks	Do not contact until dry	None	None
Do not use in food/feed areas of food handling establishments. Not for use in USDA Meat and Poultry Plants. Do not apply when occupants are present in the immediate area in institutions such as libraries or sport facilities. Use only in well ventilated areas. Firewood is not to be treated. Do not apply to pets, crops, or sources of electricity. All areas where insects hide or through which insects may enter should be treated. Exposed food should be covered.				
<b>Outdoor &amp; Perimeter</b>	Ticks	Do not contact until dry	None	None
Apply as a residual spray to outside surfaces of buildings. Repeat treatment as necessary.				
<b>Ficam D (Dust)</b>		<b>Bendiocarb - 1.0%</b>		
<b>Structures, Restaurants/Commercial Kitchens</b>	Brown Dog Ticks	None	None	None
This product is intended to be applied with a hand or power duster to hiding and runway areas and those places where pests are found. Apply to infested areas such as pet beds and resting quarters. Do not treat animals or their bedding with this product.				
<b>Outdoor &amp; Perimeter, Sanitary Sewers/Drain Lines/Outside Surfaces</b>	Ticks	None	None	None

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
To help prevent invasion of building and structures by pests, treat a band of soil and vegetation around and adjacent to the foundation.				
<b>Ficam Plus Insecticide (Wettable/soluble powder)</b>		<b>Bendiocarb + Pyrethrins - 29.45 +3.06%</b>		
<b>Structures</b>	Brown Dog Ticks	Do not contact until dry	None	None
Apply spray to infested areas. Do not treat pets or their bedding with this product. Do not apply to humans, their clothing or bedding. Avoid breathing and working in spray mist or dust. With proper spraying, this product does not produce a visible deposit. However, if unevenly applied, or sprayed to run-off, a visible deposit may occur on some dark surfaces. Do not apply in conduits, motor housings, junction boxes, and switch boxes or ther electrical equipment because of possible shock hazard. Do not contaminate fruit, vegetables, or other feed or food crops.				
<b>Food Areas of Food Handling Establishments</b>	Brown Dog Ticks	Do not contact until dry	None	None
Apply spray to infested areas. Do not treat pets or their bedding with this product. Apply spray to infested areas. Do not treat pets or their bedding with this product. Do not apply to humans, their clothing or bedding. Avoid breathing and working in spray mist or dust. With proper spraying, this product does not produce a visible deposit. However, if unevenly applied, or sprayed to run-off, a visible deposit may occur on some dark surfaces. Do not apply in conduits, motor housings, junction boxes, and switch boxes or ther electrical equipment because of possible shock hazard. Do not contaminate fruit, vegetables, or other feed or food crops.				
<b>USDA Inspected Facilities</b>	Brown Dog Ticks	Do not contact until dry	None	None
This product is authorized for use in non-food areas of Federally inspected Meat and Poultry Plants. Apply spray to infested areas. Do not treat pets or their bedding with this product. Do not apply to humans, their clothing or bedding. Avoid breathing and working in spray mist or dust. With proper spraying, this product does not produce a visible deposit. However, if unevenly applied, or sprayed to run-off, a visible deposit may occur on some dark surfaces. Do not apply in conduits, motor housings, junction boxes, and switch boxes or ther electrical equipment because of possible shock hazard. Do not contaminate fruit, vegetables, or other feed or food crops.				
<b>Outdoor &amp; Perimeter</b>	Ticks	None	None	None
Apply as a residual spray to surfaces of buildings. Barrier treatments will help prevent infestations of buildings.				
<b>Flee Insecticide (Emulsifiable concentrate)</b>		<b>Permethrin - 36.8%</b>		
<b>Structures</b>	Brown Dog Ticks	Do not contact until dry	None	None
Use only in well ventilated areas. Do not treat where food is exposed. Do not use in fogging equipment. Do not apply to pets, crops, firewood or sources of electricity.				
<b>Food Processing (non-food/feed areas)</b>	Brown Dog Ticks	Do not contact until dry	None	None

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
Use only in well ventilated areas. Do not treat where food is exposed. Do not use in fogging equipment. Do not apply to pets, crops, firewood or sources of electricity. Do not use in food areas of food handling establishments. Not for use in Federally inspected Meat and Poultry Plants.				
<b>Sensitive Environments</b>	Brown Dog Ticks	Do not contact until dry	None	None
Use only in well ventilated areas. Do not treat where food is exposed. Do not apply in patient rooms or in any rooms while occupied by the elderly or infirm. Do not apply to classrooms when in use. Do not apply to institutions in the immediate area when occupants are present.				
<b>Outdoor &amp; Perimeter</b>	Ticks	None	None	None
Apply as a residual spray to outside surfaces of buildings. Repeat treatment as necessary.				
<b>Frontline Top Spot for Dogs (Pour-on)</b>		<b>Fipronil - 9.7%</b>		
<b>Dogs</b>	Ticks	None	None	4 weeks
Available only from licensed, practicing veterinarians. Apply to dogs and puppies (10 weeks or older). Persons applying this product must wear latex gloves. Snap applicator tip away from face and body. Place applicator tip through animals's hair to the skin level between the shoulder blades. Squeeze tube, applying entire contents in a single spot to the animal's skin. Avoid superficial application to the animal's hair. One pipette per treatment is needed for dogs under 88 lbs.				
<b>Grenade ER (Microcapsulated suspension)</b>		<b>Lambda-cyhalothrin - 9.7%</b>		
<b>Cattle Barns</b>	Ticks	Do not contact until dry	None	3 weeks
DO NOT apply when animals are present. DO NOT make any applications to feedstuff or watering equipment.				
<b>Horse Stables, Kennels, Swine Housing, Beef Housing, Sheep Housing</b>	Ticks	Do not contact until dry	None	3 weeks
Apply as general surface and/or crack and crevice treatment. DO NOT apply when animals are present. DO NOT make any applications to feedstuff or watering equipment.				
<b>Kicker (Emulsifiable concentrate)</b>		<b>Pyrethrins + PBO - 6 + 60%</b>		
<b>Pets</b>	Ticks	None	None	None
Spray or sponge water dilution to all parts of the animal's body except eyes, nose, mouth, and genitalia.				
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
<p>This product is an EC used as a tank -mix to increase flushing and knockdown of pests and improve control of resistant insects. Can be used with residual insecticides. This product may also be used as a space spray or undiluted ULV treatment. The insecticidal components of this product are classified as food additives and established tolerances will not be exceeded when used as directed. For residual control thoroughly spray surfaces where insects are usually found. This product may be used as a space spray to control crawling and flying insects.</p>				
<b>Food Areas of Food Handling Establishments</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
<p>This product is an EC used as a tank -mix to increase flushing and knockdown of pests and improve control of resistant insects. Can be used with residual insecticides. This product may also be used as a space spray or undiluted ULV treatment. The insecticidal components of this product are classified as food additives and established tolerances will not be exceeded when used as directed. For residual control thoroughly spray surfaces where insects are usually found. This product may be used as a space spray to control crawling and flying insects. This product may be applied as a general surface, space, spot or crack and crevice treatment in both food and non-food areas of food handling establishments. When used as a space spray, vacate the treated area and keep the area closed for at least 30 minutes after treatment. Ventilate the area before reoccupying. Repeat treatment as necessary.</p>				
<b>USDA Inspected Facilities</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
<p>This product is an EC used as a tank -mix to increase flushing and knockdown of pests and improve control of resistant insects. Can be used with residual insecticides. This product may also be used as a space spray or undiluted ULV treatment. The insecticidal components of this product are classified as food additives and established tolerances will not be exceeded when used as directed. For residual control thoroughly spray surfaces where insects are usually found. This product may be used as a space spray to control crawling and flying insects. The use of this product as a space spray must be confined to time periods when the plant is not in operation.</p>				
<b>Outdoor &amp; Perimeter</b>	Ticks	Do not contact until dry	None	None
<b>Microcare Pressurized Pyrethrum Capsule Suspension (Aerosol)</b>		<b>Pyrethrins + Piperonyl Butoxide + MGK264 - 0.300 + 2.200 +0.336%</b>		
<b>Structures, Food Processing (non-food/feed areas), Food Areas of Food Handling Establishments</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
<p>Apply to pet beds and resting quarters, adjacent cracks and crevices, between and under cushions of upholstered furniture and other areas where pests may be present.</p>				
<b>Utilities</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
<p>Apply to pet beds and resting quarters, adjacent cracks and crevices, between and under cushions of upholstered furniture and other areas where pests may be present. Use actuator to treat open boxes and exposed surfaces.</p>				

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
<b>Mobile Homes/Travel Trailers/Recreational Vehicles, Vessels (Boats/Ships)</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Apply to pet beds and resting quarters, adjacent cracks and crevices, between and under cushions of upholstered furniture and other areas where pests may be present. Close all windows and doors. Disperse in all locations. Leave area closed for 15 minutes.				
<b>Outdoor &amp; Perimeter</b>	Ticks	Do not contact until dry	None	None
Treat outdoor areas which are landscaped, planted or mulched or unmaintained.				
<b>Campgrounds/Recreation Areas</b>	Ticks	Do not contact until dry	None	None
Treat outdoor areas which are landscaped, planted or mulched or unmaintained. Treat in the direction of a slight breeze away from user that allows the fog to drift into areas of infestation.				
<b>Microcare Pressurized Pyrethrum Capsule Suspension (Formula 1) (Aerosol)</b>		<b>Pyrethrins + Piperonyl Butoxide + MGK264 - 0.300 + 2.200 + 0.336%</b>		
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	None	None	None
Use this product with supplied actuator and tubes. Inject this product into cracks and crevices. Spot, space, and general treatments are permitted for certain applications. To make a spot treatment release product onto surface. Apply this product to pet beds and resting quarters, adjacent cracks and crevices, baseboards, carpets and floor coverings, etc.				
<b>Mobile Homes/Travel Trailers/Recreational Vehicles</b>	Brown Dog Ticks, Lone Star Ticks	None	None	None
Use this product with supplied actuator and tubes. Inject this product into cracks and crevices. Spot, space, and general treatments are permitted for certain applications. To make a spot treatment release product onto surface. Apply this product to pet beds and resting quarters, adjacent cracks and crevices, baseboards, carpets and floor coverings, etc. Treat area for 1-3 seconds. Leave unoccupied for 15 minutes.				
<b>Vessels (Boats/Ships)</b>	Brown Dog Ticks, Lone Star Ticks	None	None	None
Use this product with supplied actuator and tubes. Inject this product into cracks and crevices. Spot, space, and general treatments are permitted for certain applications. To make a spot treatment release product onto surface. Apply this product to pet beds and resting quarters, adjacent cracks and crevices, baseboards, carpets and floor coverings, etc. Treat area for 1-3 seconds. Leave unoccupied for 15 minutes.				
<b>Outdoor &amp; Perimeter</b>	Ticks	None	None	None

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
For treatment of localized infestations in outdoor areas. Treat areas where insects are likely to enter buildings.				
<b>Campgrounds/Recreation Areas</b>	Ticks	None	None	None
Treat so that slight breeze allows fog to drift into areas of infestation. Allow spray to dry before re-entering area.				
<b>Optem Cyfluthrin CS (Prescription Treatment) (Microcapsulated suspension)</b>		<b>Cyfluthrin - 6.0%</b>		
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Inject cracks and crevices and/or voids where these insects may be harboring or hibernating. Do not apply to humans or their clothing or bedding. Do not contaminate food or use on household pets. Cover fish tanks prior to application. Dilute the product in water.				
<b>Food Processing (non-food/feed areas)</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Inject cracks and crevices and/or voids where these insects may be harboring or hibernating. Do not apply to humans or their clothing or bedding. Do not contaminate food or use on household pets. Cover fish tanks prior to application. Dilute the product in water. Not for use in USDA meat and poultry plants.				
<b>Outdoor &amp; Perimeter</b>	Ticks	Do not contact until dry	None	None
For treatment of infestations of these insects in outdoor areas which are landscaped, planted, mulched, or unmaintained. Dilute in water and spray onto outdoor surfaces and into cracks and crevices, and into voids. Can be used as a perimeter treatment to help prevent infestations.				
<b>P.I. Contact Insecticide (Formula 1) (Aerosol)</b>		<b>Pyrethrins + Piperonyl Butoxide - 0.5 + 4.0%</b>		
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	None	None	None
Direct toward pet beds and holding quarters.				
<b>Food Areas of Food Handling Establishments</b>	Brown Dog Ticks, Lone Star Ticks	None	None	None
Direct toward pet beds and holding quarters. When applying as a space treatment in food areas, the operation being treated should be shut down. All food utensils and equipment must be covered or cleaned after treatment.				
<b>Hospitals</b>	Brown Dog Ticks, Lone Star Ticks	None	None	None
Direct toward pet beds and holding quarters. Patients should be removed from room prior to treatment. Room should be ventiaalted for at least 2 hours after spraying. Do not return patients to room until after ventilation.				

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
<b>Nursing Homes</b>	Brown Dog Ticks, Lone Star Ticks	None	None	None
Direct toward pet beds and holding quarters. Patients should be removed from room prior to treatment. Room should be ventiaalted for at least 2 hours after spraying. Do not return patients to room until after ventilation.				
<b>Permethrin II (Emulsifiable concentrate)</b>		<b>Permethrin - 10.0%</b>		
<b>Cattle Barns, Dairies, Feedlots, Horse Stables, Milking Parlors, Swine Housing, Beef Housing, Sheep Housing, Poultry Housing</b>	Ticks	None	None	14 days
May be applied as a spray, mist or fog. Do not spray feed, food or water.				
<b>Permethrin II Dairy Cattle &amp; Barn Spray (Emulsifiable concentrate)</b>		<b>Permethrin - 10.0%</b>		
<b>Cattle Barns, Dairies, Feedlots, Horse Stables, Milking Parlors, Swine Housing, Beef Housing, Poultry Housing</b>	Ticks	None	None	14 days
Apply as a spray, mist or fog. Do not spray feed, food or water.				
<b>Dogs</b>	Ticks	None	None	14 days
May be used as a dip or spray. Do not use on puppies less than 3 months old or sick, old or debilitated animals.				
<b>Permethrin II Horse and Stable Spray (Emulsifiable concentrate)</b>		<b>Permethrin - 10.0%</b>		
<b>Cattle Barns, Dairies, Feedlots, Horse Stables, Milking Parlors, Swine Housing, Beef Housing, Sheep Housing, Poultry Housing</b>	Ticks	None	None	None
May be used as a spray, mist or fog.				
<b>Pestab (Wettable/soluble powder)</b>		<b>Lambda-cyhalothrin - 10.0%</b>		
<b>Animal Areas/Quarters, Kennels</b>	Ticks	Do not contact until dry	None	3 weeks

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
Do not apply when animals are present. Allow applications to dry before restocking the facility. Apply as a general and/or crack and crevice treatment.				
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	3 weeks
<b>Restaurants/Commercial Kitchens</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	3 weeks
Use as a crack and crevice or spot treatment to selective surfaces. Do not apply when facility is in operation or when foods are exposed.				
<b>Grocery Stores/Supermarkets, Hotels/motels</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	3 weeks
Apply as a crack and crevice or spot treatment to selective surfaces. Do not apply when facility is in operation or food is exposed.				
<b>Outdoor &amp; Perimeter</b>	Ticks	None	None	3 weeks
Barrier treatments: To prevent infestations of building, apply to a band of soil and vegetation 6-10 feet wide around and adjacent to outside surfaces of buildings. Also may be applied to lawn areas around residential/nonresidential buildings. Apply as a coarse spray to thoroughly and uniformly wet the foundation and/or band area.				
<b>Prelude (Emulsifiable concentrate)</b>		<b>Permethrin - 25.6%</b>		
<b>Structures</b>	Brown Dog Ticks	Do not contact until dry	None	None
<b>Food Processing (non-food/feed areas)</b>	Brown Dog Ticks	Do not contact until dry	None	None
Do not apply in food/feed areas of food/feed handling establishments. Not for use in federally inspected meat and poultry plants. During indoor application, do not allow dripping or runoff to occur. Do not apply when occupants are present in the immediate area.				
<b>Food Storage Areas (warehouses)</b>	Brown Dog Ticks	Do not contact until dry	None	None
Do not apply in warehouses while raw agriculture commodities for food or feed are being stored. During indoor application, do not allow dripping or runoff to occur. Do not apply when occupants are present in the immediate area.				
<b>Outdoor &amp; Perimeter</b>	Ticks	None	None	None
<b>Pro-Control Plus Total Release Aerosol Insecticide (Aerosol)</b>		<b>Pyrethrins + Cyfluthrin + Piperonyl Butoxide - 0.5 + 0.1 + 1.0%</b>		
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	2 hours	None	None

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
Open doors, drawers, and closets. Shut off fans and air conditioning. Set fogger on stand. Immediately leave treated area. Keep area closed for at least 2 hours. Allow treated area to air for 30 minutes.				
<b>Hospitals, Nursing Homes</b>	Brown Dog Ticks, Lone Star Ticks	2 hours	None	None
Do not apply this product in any rooms while occupied by patients, the elderly, or infirmed. Open doors, drawers, and closets. Shut off fans and air conditioning. Set fogger on stand. Immediately leave treated area. Keep area closed for at least 2 hours. Allow treated area to air for 30 minutes.				
<b>Day Care Centers, Schools</b>	Brown Dog Ticks, Lone Star Ticks	2 hours	None	None
Do not apply in classroom when in use. Open doors, drawers, and closets. Shut off fans and air conditioning. Set fogger on stand. Immediately leave treated area. Keep area closed for at least 2 hours. Allow treated area to air for 30 minutes.				
<b>Pro-Control Total Release Aerosol Insecticide (Formula 1) (Aerosol)</b>		<b>Pyrethrins + Piperonyl Butoxide + MGK264 - 0.535 + 1.050 + 1.710%</b>		
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	2 hours	None	None
Open all doors, drawers, and closets. Shut off fans and air conditioners. Set fogger on stand and leave treated area. Keep area closed for 2 hours. and allow area to air for 30 minutes.				
<b>Sensitive Environments</b>	Brown Dog Ticks, Lone Star Ticks	2 hours	None	None
Open all doors, drawers, and closets. Shut off fans and air conditioners. Set fogger on stand and leave treated area. Keep area closed for 2 hours, and allow area to air for 30 minutes. Ventilate patient areas for 2 hours before returning patients to their rooms.				
<b>Purina Hard Hitter Aerosol (Aerosol)</b>		<b>Permethrin - 0.50%</b>		
<b>Dogs</b>	Ticks	None	None	7 days
Using protective gloves, start at the tail, stroke against the lay of the hair, spraying the parted fur in short bursts, directly behind the hand to insure penetrating the coat. Not recommended for puppies less than four weeks old.				
<b>Purina Hard Hitter Aqueous Spray (Emulsifiable concentrate)</b>		<b>Permethrin - 0.50%</b>		
<b>Dogs</b>	Ticks	None	None	None
Do not spray into eyes and face. Avoid contact with genitalia. Not recommended for use on puppies less than four weeks old.				

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
<b>Purina Hard Hitter Dust (Dust)</b>		<b>Permethrin - 0.25%</b>		
<b>Cats</b>	Ticks	None	None	None
Dust animals thoroughly working the dust into the hair down to the skin. Pay close attention to legs and feet. Avoid getting dust in pet's eyes. Dust sleeping area including bedding and cracks and crevices.				
<b>Dogs</b>	Ticks	None	None	None
Dust animals thoroughly working the dust into the hair down to the skin. Pay close attention to legs and feet. Avoid getting dust in pet's eyes. Dust sleeping area including bedding and cracks and crevices.				
<b>Ravap E.C. (Emulsifiable concentrate)</b>		<b>Tetrachlorvinphos + Dichlorvos - 23.0 + 5.3%</b>		
<b>Poultry Housing</b>	Ticks	None	None	10 days
Do not spray manure where runoff to soil or water can occur. Do not spray animals directly with this concentration.				
<b>Saga WP Insecticide (Wettable/soluble powder)</b>		<b>Tralomethrin - 40.00%</b>		
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
<b>Food Areas of Food Handling Establishments</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Applications are permitted in food/feed areas of food/feed handling and processing establishments as a general spray, spot, or crack and crevice treatment.				
<b>USDA Inspected Facilities</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Apply only when facility is not in operation. Do not apply directly to food/feed or food/feed handling surfaces.				
<b>Aircraft</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Do not apply when passengers or non-essential personnel are present in area to be treated. Treatments can be repeated as necessary.				
<b>Outdoor &amp; Perimeter</b>	Ticks	Do not contact until dry	None	None
Perimeter treatment-- To help prevent infestations of buildings, apply product where pests are active and may find entrance. Residual spray-- Apply to surfaces of buildings, porches, screens, window frames, eaves, patios, refuse dumps, and garages.				

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
<b>Talstar Lawn &amp; Tree Flowable (Emulsifiable concentrate)</b>		<b>Bifenthrin - 7.9%</b>		
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	Do not contact until dry	None	None
Apply as a coarse low pressure, crack and crevice or spot spray to areas where pests hide. Do not use as a space spray.				
<b>Building Exteriors</b>	Ticks	Do not contact until dry	None	None
Apply as a residual spray to outside surfaces of buildings.				
<b>Tri-die Pressurized Silica + Pyrethrin Dust (Aerosol)</b>		<b>Pyrethrins + Piperonyl Butoxide + Amorphous Silica Dioxide - 0.6 + 4.8 + 8.0%</b>		
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	None	None	None
Treat pet bedding, floor and floor coverings and all areas where pests may inhabit. Use with the supplied actuator and tubes to inject product where insects may be harboring, living and breeding.				
<b>Food Areas of Food Handling Establishments</b>	Brown Dog Ticks, Lone Star Ticks	None	None	None
Treat pet bedding, floor and floor coverings and all areas where pests may inhabit. Application of this product in the food areas of food-handling establishments other than as a crack and crevice treatment are not permitted. Use with the supplied actuator and tubes to inject product where insects may be harboring, living and breeding.				
<b>Outdoor &amp; Perimeter</b>	Ticks	None	None	None
Treat cracks around doors and windows, under siding and voids foundation level, beneath guards on loading docks, into cracks in foundations and floors and in other places where these pests may enter building.				
<b>ULD BP-100 Contact Insecticide (Formula 1) (Ready-to-Use Liquid)</b>		<b>Pyrethrins + Piperonyl Butoxide + MGK264 - 1.00 + 2.00 + 2.94%</b>		
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	2 hours	None	None
Use full strength or dilute product as desired according to dilution table. Apply using a mechanical aerosol generator. Do not remain in treated areas after application, and leave room closed for at least 1 hour. Ventilate thoroughly before occupants are allowed to re-enter.				
<b>ULD BP-50 Contact Insecticide (Ready-to-Use Liquid)</b>		<b>Pyrethrins + Piperonyl Butoxide - 0.5 + 5.0%</b>		
<b>Animal Housing</b>	Ticks	None	None	None

**Table 1.** Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
Apply as a space and contact spray. This product may be applied through mechanical aerosol or ULV generators as well as thermal and conventional fogging or spraying equipment.				
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	None	None	None
This product may be applied through mechanical aerosol or ULV generators, as well as thermal and conventional fogging or spraying equipment. Use as a space or contact spray.				
<b>Food Areas of Food Handling Establishments, USDA Inspected Facilities</b>	Brown Dog Ticks, Lone Star Ticks	None	None	None
Designed for use in edible product areas of official establishments operating under the federal meat, poultry, shell egg grading and egg products inspection programs and in other food processing plants. This product may be applied through mechanical aerosol or ULV generators, as well as thermal and conventional fogging or spraying equipment. Use as a space or contact spray.				
<b>ULD BP300 Contact Insecticide (Formula 1) (Ready-to-Use Liquid)</b>		<b>Pyrethrins + Piperonyl Butoxide + MGK264 - 3.00 + 6.00 + 10.00%</b>		
<b>Structures</b>	Brown Dog Ticks, Lone Star Ticks	2 hours	None	None
Do not apply product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons. Do not enter treated areas without protection until thoroughly ventilated or sprays have dried. For indoor application as a space, area, or contact spray. This product may be applied through mechanical aerosol or ultra low volume cold aerosol generators as well as thermal and conventional fogging or spraying equipment. As a space spray, use undiluted to kill accessible stages of insects infesting food in storage or being processed. Close room or warehouse and shut off all ventilating systems. Do not remain in the treated area after application and leave room closed for at least 1 hour. Ventilate thoroughly before occupants are allowed to re-enter. This product may be diluted using a white mineral oil or an odorless light petroleum hydrocarbon.				
<b>Ultraguardian Flea Foam (Prescription Treatment 410) (Aerosol)</b>		<b>Pyrethrins + Piperonyl Butoxide - 0.15 + 0.70%</b>		
<b>Cats</b>	Ticks	None	None	None
Do not use on kittens under two weeks of age.				
<b>Dogs</b>	Ticks	None	None	None
Do not use on puppies less than two weeks old.				