## How to remove a tick safely from your treasured pet or ???YOURSELF???

The safe removal of a tick involves a method where NO COMPRESSION or pressure is placed on the abdomen of a tick.

**DO NOT** squeeze or crush the body of the tick because this may force infective body fluids through the mouthparts and into the wound site.

By using your hands, one places pressure on the abdomen on the tick, every time. Not only that, but an open cut or scrape to your hands sharply increases the risk of cross-contamination.

This compression causes the tick to **release saliva into you** (or your dog, cat, horse etc) at the bite wound and a backflow of the tick's digestive juices flow into the bite wound.

A tick's saliva contains irritating substances and sometimes pathogenic organisms that can lead to infections and/or allergies.

Tweezers and other instruments exert pressure on the tick. TICK TWISTER does not compress the body of the tick.

If the tick is infected with pathogenic organisms (for example, African Tick Bite Fever, Rickettsial pox, New Pathogenic Rickettsiae, Crimean-Congo Haemorrhagic Fever or Borrelia burgdorferi, the agent of Lyme disease etc), it can transmit the infection to the host during the feeding process. Many ticks are infected with more than one micro-organism.

As the tick feeds, the pathogens multiply, migrate to the tick's salivary glands, and are carried into the wound site along with the saliva.

This process normally takes a couple of hours to occur and that is why it is so important to remove a tick as soon as possible, preferably with in the first 12 - 24 hours as this greatly reduces the risk of infection. Data suggest that the prompt removal of an infected tick, within approximately 24 hours, reduces the risk of transmission to nearly zero

The tick's rostrum (LEFT: the part that is embedded in the skin and improperly referred to as "the tick's head") is covered with backward pointing spikes that allow the tick to "anchor" in the skin.

By pulling up on the tick, the spikes will rise and lock the rostrum in the skin. The tick may break leaving body parts resting in the skin and causing a painful inflammation, or an infection.

By twisting effectively and correctly only with a Tick Twister, NOT with one's fingers, the spikes bend into the axis of rotation, and the tick is easily removed, without traction, thereby decreasing



the risks of breaking the rostrum.

Most ticks secrete a cement-like substance during feeding. This material helps secure their mouthparts firmly in the flesh, further adding to the difficulty of removal by just pulling.

If one just pulls back sharply with a tweezer or one's fingers as is often done, this may tear the mouthparts from the body of the tick, leaving them embedded in the skin.

If this happens, do not panic. Embedded mouthparts are comparable to having a splinter in your skin. However, to prevent the chance of secondary infection, it is best to remove them. Seek medical assistance if necessary.

**DO NOT** apply substances such as petroleum jelly, finger nail polish, finger nail polish remover, repellents, pesticides, or a lighted match to the tick while it is attached. These materials are either ineffective, or worse, they agitate the tick and cause it to force more infective fluid into the wound site.

**REMEMBER:** Successful transmission of pathogens requires the tick to be attached for at least several hours. Therefore, the sooner and more correctly infective ticks are removed, without irritating them or breaking off the mouth parts, the less likely they will be able to transmit infection.

It is impossible to tell if a tick is infected just by looking at it. Only analysis in a laboratory can determine infection status therefore always keep the tick ( the Tick Twister comes with a small ziplock bag for you to store any ticks in) and monitor yourself or your pet over the next few days. Should you see any symptoms of infection, please consult a medical professional and have the tick analysed.