

# Allergic Conditions *caused by* Tick Bites



The most common serious medical complaints caused by ticks are **allergic reactions** resulting from their bites. These reactions can manifest as:

- Large local reactions.
- Tick-induced anaphylaxis (a sudden and severe allergic reaction).
- Mammalian-meat induced anaphylaxis associated with previous tick bites.



Tick bites can cause mild to life-threatening reactions to mammalian meats for example, from an animal such as beef, lamb, pork, goat, venison.



# **ANAPHYLAXIS CAUSED BY TICK BITES**

- **Life-threatening allergic reactions to ticks are much more common than similarly severe reactions to bees or wasps.**
- **Fatal anaphylaxis to tick bites is rare.**
- **When an anaphylaxis to a tick occurs, the treatment is the same as for anaphylaxis to any agent.**
- **Australian researchers have shown the allergens provoking anaphylaxis are proteins in the tick's saliva.**
- **People who have an anaphylactic reaction to a tick bite react only when the tick is disturbed.**
- **Researchers at Royal North Shore Hospital believe they may have identified a blood test which will confirm whether anaphylaxis has been caused by a tick.**



# HOW TO RECOGNISE THESE ALLERGIES

## Large local reactions

- **“Large local reactions” are allergic reactions.**
- **Large local reactions are the least dangerous type of allergic reaction to ticks, but at the time they are physically limiting and very uncomfortable.**
- **These reactions commence within 4 - 12 hours and increase in size for 24 - 72 hours.**
- **These reactions typically extend from the bone joint above the bite to the bone joint below the bite.**
- **Treatment consists of rest, elevation of the affected area above the level of the heart, application of ice to the site of the bite to help reduce swelling and pain, antihistamines while swelling persists, and oral cortisone, a common treatment for inflammation.**
- **Large local reactions usually take at least 10 days to resolve and typically have no after effects.**



# **TICK BITES & MAMMALIAN MEAT ALLERGIES**

- **Typically, tick bites occur before any allergic reactions to mammalian meats.**
- **In the absence of previous tick bites, mammalian meat allergy is virtually unheard of in adults.**
- **Mammalian meat allergy symptoms often only appear months after the tick bite/s.**
- **The allergic reaction to red meat is typically a delayed reaction which occurs several hours after eating the meat (often 3 - 6 hours later).**
- **For more information about tick bites and mammalian meat allergies, as well as an informative and educational Powerpoint presentation, please go to the website: [www.tiara.org.au](http://www.tiara.org.au)**



For additional information  
please go to these useful websites:

- [www.tiara.org.au](http://www.tiara.org.au)
- [www.allergy.org.au](http://www.allergy.org.au)
- [www.allergyfacts.org.au](http://www.allergyfacts.org.au)
- [www.medent.usyd.edu.au](http://www.medent.usyd.edu.au)

To make a donation to help fund  
our research and awareness programs for  
tick-induced allergies, please go to:

- [www.rnsfundraising.com.au/store/donate/  
make-a-donation/](http://www.rnsfundraising.com.au/store/donate/make-a-donation/)

Then select: **TiARA Fund (Tick Allergies)** from  
the drop down menu to make your donation.

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