

## *Tick bites*

***Ticks! These bloodsucking parasites feed on blood and are often encountered by people in Summer; especially if out bushwalking. Did you know that ticks are second only to mosquitoes as vectors (transmitters) of human disease? This information will give you a guide to prevention of tick bites before going out for a walk, advice on how to treat the bite, and how to REMOVE ticks. If after getting a tick bite your bite remains a problem, or you feel unwell but don't know why, please seek medical care.***

### **So are there different types of ticks?**

***Would you believe there are over 800 species of ticks that have been identified world-wide?! In Australia alone, we have approximately 75 species. Ticks in Australia are divided into 2 families; soft ticks and hard ticks. Soft ticks are rarely seen and usually infest nests, burrows and buildings. Hard ticks are the ones we come across most often, living outdoors and attaching themselves to passing host animals.***

### **Where am I most likely to come across ticks?**

**Ticks, like many insects, occur in humid, moist bushy areas and are most commonly found in the eastern coastal areas of Australia. Ticks are not very mobile, so they rely on passing animals for a blood meal. They crawl up the stems of grasses or along branches and perch with their front legs extended, ready to catch on to any host that may brush past them.**

### **What happens to the body when you are bitten by a tick?**

**Once the tick is on its host, it looks for a suitable place to attach. Areas of the body commonly favoured by ticks include behind the ears, the back of the head and neck, the backs of the knees, and the groin and armpits.**

### **Allergic reactions**

**Ticks inject a toxin that may cause local irritation or a mild allergic reaction, however most tick bites cause little or no symptoms. In some rare cases ticks can pose a serious threat if the patient experiences a severe allergic reaction known as anaphylaxis.**

### **Tick paralysis**

**Tick paralysis is the only tick-borne disease that is not caused by an infectious organism. The illness is caused by a neurotoxin produced in the tick's salivary gland. The initial symptoms of tick paralysis may include unsteadiness, increased weakness of the limbs, multiple rashes, headache, fever, flu like symptoms, tenderness of lymph nodes, and partial facial paralysis. Tick paralysis develops slowly as the tick engorges, which will take several days. Despite the removal of the tick, the patient's condition typically will continue to deteriorate for a time and recovery is often slow.**

### **Tick-borne infectious diseases**

- **Tick typhus** is a bacteria-like infection transmitted from native animals by ticks. Clinical symptoms include headaches, multiple rashes, swollen glands, fever and flu like symptoms. The disease is rarely fatal and is commonly treated with antibiotics.
- **Lyme disease** is a tick-borne bacterial infection common in the **northern** hemisphere. Symptoms are varied and may include rashes, fever, muscle and joint pain, and arthritis. The disease is not fatal and treatable with antibiotics. Despite clinical cases being reported from the early 1980's, there has been **no confirmation that the disease occurs in Australia!**
- **Q fever** is an illness caused by a bacterium and is most often spread to humans from infected animals. Although possible, this condition is **RARELY** contracted via transmission from ticks. The bacteria survive for long periods in the environment as they are resistant to heat, drying and many disinfectants. Acute Q fever can cause a severe flu-like illness that is sometimes associated with hepatitis and pneumonia.

### **Lifestyle advice for dealing with ticks**

#### **How can you prevent tick bites?**

The best way to prevent tick bites is to avoid tick-infested areas. If this is not possible, here are some handy hints to consider:

- Wear light coloured clothing, as ticks are more easily spotted and may be removed from clothing before attaching themselves to the skin.
- Wear a long sleeved shirt and long pants tucked into socks.
- Wear a wide brimmed hat.
- Apply an effective insect repellent containing DEET. This should be applied both to your clothing **AND** skin before going into tick infested areas and reapplied according to the strength of the product and pharmacist recommendation.
- After visiting a tick-infested area, remove all clothes and fully inspect the body, paying particular attention to areas behind the ears and the back of the head/neck.
- If ticks are found on clothing, they can be killed by placing the clothes in a hot dryer for 20 minutes.
- Maximise sunlight penetration to the ground in your gardens/lawn by mowing regularly, reducing mulch and leaf litter, minimising watering and trimming shrubs which overhang outdoor play areas and paths.
- Check pets regularly for ticks—many dogs and cats are infested each year and can die from tick paralysis.

#### **How to remove a tick**

Despite popular belief, it is NOT a good idea to do any of the following:

- Place any chemical such as methylated spirits onto the tick, nor should it be touched or disturbed, as the tick will inject saliva into the skin, which could make the situation worse. Do not use matches or pins, as these will just irritate the tick and make it harder to completely remove. Remember also that a tick's mouthpiece is barbed, not spiralled, so twisting the tick to pull it out does **NOT** help.

Here are some tips on effective methods for removal of ticks:

- We do not recommend spraying toxins on skin; however it may assist removal of the tick by putting some knockdown fly/wasp spray/killer onto a bit of cotton wool and apply this to the tick, wait 1 minute, and then pull it out with some **fine-tipped tweezers** (see below for illustration). There is no struggle, no resistance, no further injection of saliva etc into the skin. If this method is used, it is important that any residue is **washed off the skin immediately**. This method may be appropriate for adults, but certainly not recommended for young children/infants. **Consult your pharmacist for advice on this.**

**Please note:**

- *It is normal for your tick bite to remain slightly itchy for several weeks after removal; however if other symptoms develop, you should consult the pharmacist/doctor immediately!*
- *It is common for a portion of the head/mouthparts to be left behind after removal of a tick. This is not generally a problem, as the head of the tick will fall out as the skin sloughs off in time. However, if you notice any skin reaction, you should consult the pharmacist/doctor.*

### Treatment options for optimal care

- **Cold compresses and ice packs** can be used to relieve itching. Remember not to put ice directly onto the skin.
- **Non-sedating antihistamines** may help to relieve itching at the tick bite site and should be taken daily until the bite mark is totally gone. E.g. Telfast, Pharmacy Health Fexofenadine 180mg, Aerius, Pharmacy Health Loratadine
- **Sedating antihistamines** added to non sleepy antihistamines if itch is interfering with sleep, or causing scratching. E.g. Phenergan, Polaramine
- **Cortisone creams** will help to relieve the redness and inflammation at the tick bite site and are often used alongside antihistamines, especially if there is any allergic blistering. Please also note they are not to be applied to broken skin. E.g. Cortic-DS 1%, Eumovate, Cortic DS 1% cream
- **Soothing creams** containing lignocaine or other local anaesthetics will help to relieve the itching symptoms at the bite site. E.g. Itch-eze plus cream, SOOV Bite cream
- **Antiseptics** will keep the bite site clean and hopefully free of infection. E.g. Dettol cream, Betadine.
- **Analgesics** such as ibuprofen and paracetamol may be used to relieve mild local pain and swelling. E.g. paracetamol and ibuprofen.
- **Effective repellents** should be used in order to avoid future attacks of ticks. Remember that you should be using a repellent containing an effective dose of DEET (usually 40% or higher is best). E.g. Bushmans
- If you are not able to use DEET (for example due to skin irritation), you could try and use a repellent containing "picaridin" but please note these repellents are less effective than DEET (e.g. Aerogard Odourless).
- For those who have experienced severe allergic reactions to ticks bites, they should have access to **injectable adrenaline** (e.g. Epipen). Please consult the pharmacist for advice on this product as it is a "Pharmacist Only" medicine.