TICKS AT GLENAEON

INFORMATION FOR PARENTS AND VOLUNTEERS

NOVEMBER 2016

Reviewed Oct 2020

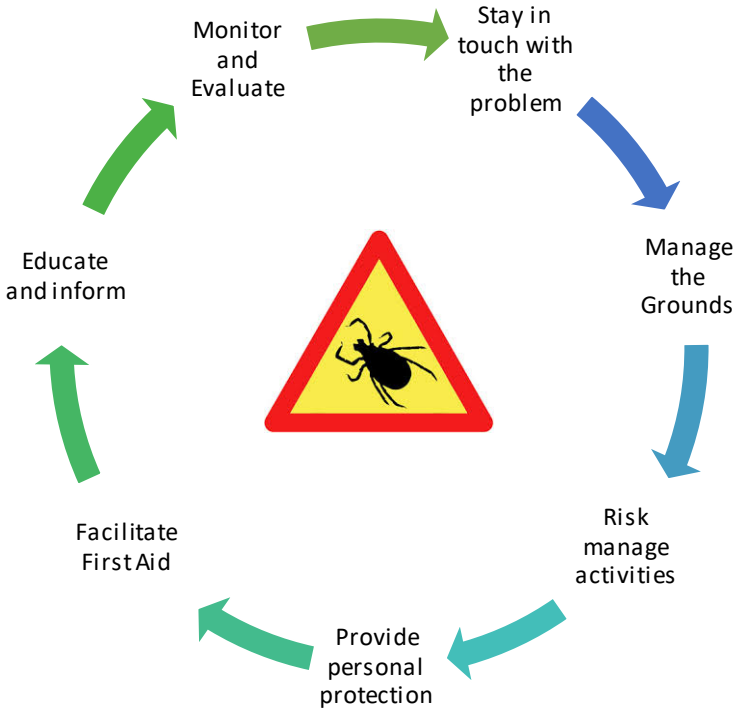
INTRODUCTION

Unfortunately, in coastal Sydney ticks are here to stay. They are all around in our environment especially anywhere damp and shaded with lots of vegetation. Ticks get onto people by climbing from the grass or undergrowth onto their feet and legs, or attaching to other parts of their body as they brush past leaves. From there they work their way to bare skin to attach and feed.

Most tick bites only cause localised irritation but **tick borne diseases, tick paralysis and severe allergic reactions can pose serious health threats to people**. In the Sydney area Tick Typhus and a disease similar to Northern Hemisphere Lyme Disease have been associated with ticks, as has been the onset of Mammalian meat allergy.

WHAT WE DO

At Glenaeon we have chosen to take an integrated pest management approach to the problem of ticks. This means that we work against their impact in a range of different ways. IPM is the strategy used in many countries which are Lyme Disease affected such as the USA. While Lyme disease has not been scientifically identified in Australia we still take ticks very seriously.



STAY IN TOUCH WITH THE PROBLEM: Since 2012 we have consulted authorities and experts in this field including scientists, government departments, local government, pest controllers etc. In addition, we keep in contact with other schools who share this problem to learn from their strategies where applicable.

MANAGE THE SCHOOL GROUNDS: We regularly mow, cut back vegetation, crown raise trees and remove damp leaf litter to reduce potential habitat and open up areas to direct sun which ticks don't like. We cut back bushes from pathways, cut holes in the tree canopy to admit sun, and at the Middle Cove campus we put up signs in areas where we know ticks may live.

RISK MANAGE ACTIVITIES AND BUSHWALKS: Dealing with ticks is built into all our risk assessment of activities from Kindy bushwalks to sport and high school camps. We also make parts of the school grounds 'out of bounds'.

PROVIDE PERSONAL PROTECTION: Tick repellent spray is available in classrooms from Years 3-6 and prior to bushwalks for other classes at Middle Cove. It is applied by students themselves under teacher supervision. At Castlecrag repellent is only applied prior to bushwalks and in this case by the teachers.

FIRST AID: We will let you know immediately if your child has a tick so that you can either remove it yourself or take your child to the doctor. **WE DON'T REMOVE TICKS AT SCHOOL**. We don't have a school nurse on either site and we

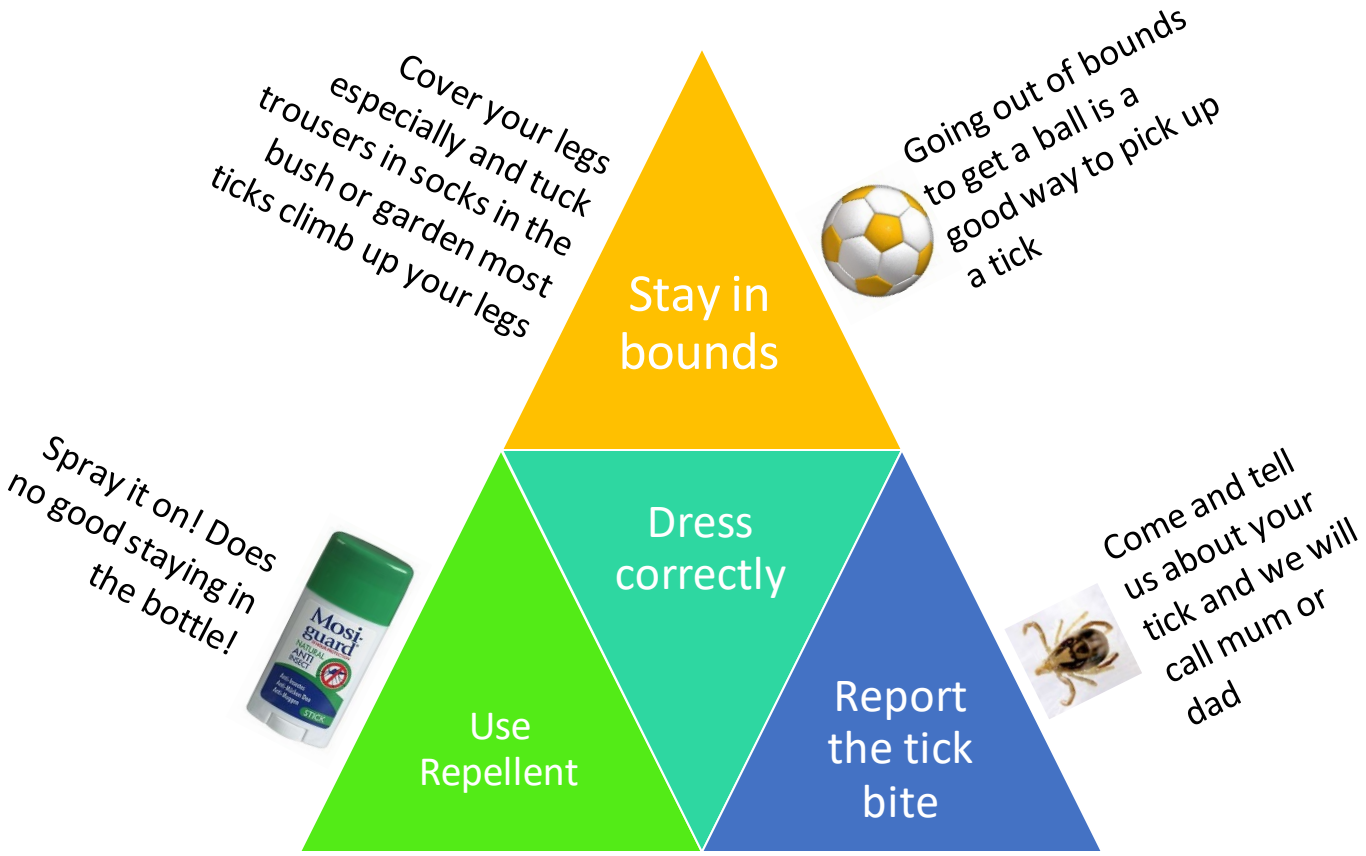
don't want a child to suffer from the consequences of an improper removal. We do this on the advice of the NSW Health Department so you can make the choice how to remove the tick from your child.

EDUCATE AND INFORM: We let children know about ticks in the environment in age appropriate ways as we do with spiders, snakes and other wildlife hazards. We don't want to frighten them unduly but they need to know how they can manage their own behaviour to avoid ticks. In 'big school' for example this includes not going out of bounds. We provide information for parents and teachers in the school newsletter and via other notices and emails.

MONITOR AND EVALUATE: We keep track of where tick bites are occurring in the school grounds so that we can tell where we have increased activity and do something about it. This can include further cutting back, changing activities or even making an area out of bounds for a while. We also do tick flagging or dragging to get a feeling how many ticks are in an area especially after changes have been made.

WHAT YOU CAN DO

CHILDREN



PARENTS

KEEP UP TO DATE WITH INFORMATION: Please read the school newsletter regularly, and other information we send but also inform yourself from credible sources about current research and recommendations.

PROVIDE PERSONAL PROTECTION: Ensure your children are appropriately dressed for their activities at school and on bushwalks and camps. Return the Insect Repellent Consent form to us.

CLOTHING CHOICES SHOULD INCLUDE:

- Light coloured clothing when own clothes are worn/excursions, camps etc
- Hat – broad brim is best
- Long sleeves and pants
- Tuck pants into socks
- Closed in shoes

USE A REPELLENT

Insect repellents must always be used in accordance with instructions and not sprayed on inside. Wash hands after application

ENCOURAGE YOUR CHILDREN TO STAY IN BOUNDS: Reinforce the messages that the school gives children about staying in bounds and supervise them at out-o- hours activities when they might be tempted to roam further afield.

CHECK YOUNG CHILDREN AT HOME: Check children and ensure older children tell you if they find a tick. In adults, ticks will generally climb up legs from the ground but as children come into much more direct contact with their environment they can be anywhere.

- Under the arms
- In and around the ears
- Inside belly button
- Back of the knees
- In and around the hair
- Between the legs
- Around the waist

RESPOND QUICKLY IF YOUR CHILD HAS A TICK: Please come to school **as soon as possible** and either remove the tick yourself or take your child to a doctor. We have fine nosed tweezers for the purpose.

FOLLOW UP WITH A DOCTOR:

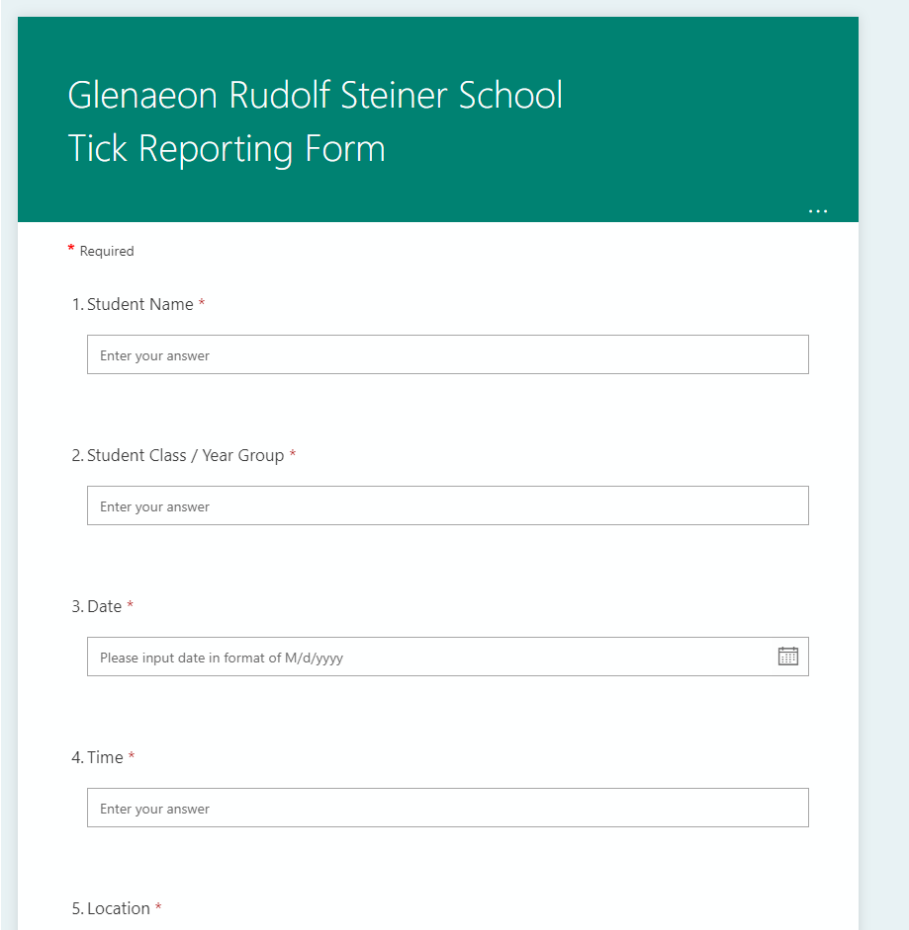
- If you/your child has a known allergy
- If flu-like symptoms develop or any other feelings of malaise, aches or pains
- If any rashes beyond localized irritation develop
- If any signs of tick paralysis develop
- If you don't feel confident about removing a tick
- If you have **any** concerns at all!

OTHER THINGS YOU CAN DO: Regularly check your pets and dry 'play' or outdoor clothes in a hot dryer for 30-40minutes.

REPORT TICKS TO US: Please!! This can be by phone or email or you can use the tick reporting form on GLO which is really easy. We use this information to target our grounds work and risk manage activities.

Look for the parents section

Find the Tick reporting form on GLO:



FOR MORE INFORMATIO …

These links may be useful:

http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-tick-bite-prevention.htm

http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-lyme-disease.htm

http://medent.usyd.edu.au/arbovirus/mosquit/repellent_guidelines_2011.pdf

http://www.aabr.org.au/learn/publications-presentations/ticks-and-tick-borne-diseases-protecting-yourself-2/

These links may be useful

DOCTORS – GPA COMPILING A LIST OF GP'S RECOMMENDED BY PARENTS

Sometimes the school is asked to recommend doctors for tick bites. The school is not in a position to recommend medical practitioners or others who can remove ticks and treat bites or symptoms. However, the Glenaeon Parents Association would like to gather information from parents, based on their knowledge and experiences, that the GPA can then make available to all parents. To help the GPA to do this:

- If you are aware of or would recommend a medical practitioner who has removed ticks or treated tick bites, please email their contact details and a brief summary of the service they provide to the GPA on the following email address

gpa@glenaeon.nsw.edu.au

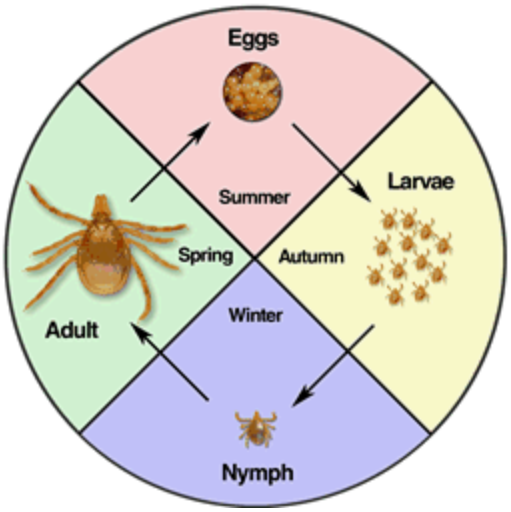
NOTES FROM TICK INFORMATION EVENING

On 19 Oct 2016, we were very fortunate to welcome Medical Entomologist Stephen Doggett from Sydney University and Westmead Hospital, to speak with us about ticks and their habits and how to best combat them. We were especially fortunate as Stephen would otherwise have been participating in the SBS Insight Program 'Tick Sick' which aired on the previous Tuesday, and which you may have seen. Stephen provided much valuable information about ticks, and this is just a summary of some of the key points that will be useful to parents.

Tick Life cycle, habits and problems they cause

Most of the ticks in our environment are paralysis ticks, *Ixodes holocyclus*

Ticks have four life stages and egg, larval, nymph, adult. These stages accord roughly with our seasons as shown in the diagram below:



Once hatched ticks need a blood meal to progress to the next life stage

Larval or seed ticks (the tiny ones that often bite in numbers) have not yet bitten another host (animal or human) and will therefore be extremely unlikely to be carrying any pathogens. They are also too small to be a paralysis risk and are less likely to trigger a severe allergic reaction. They are however very itchy and unpleasant. Stephen suggests applying 'Lyclear' cream which will kill them, and then allowing them to fall off/out over time. If you are trying to identify them, Larval ticks are very tiny (smaller than a pin head) and they only have 6 legs.

Nymph and Adult ticks will have already had a blood meal and therefore may be carrying pathogens. Nymph ticks look like a tiny version of an adult tick.

How they move around

Ticks are hatched on the ground or in low vegetation and are less mobile in the larval stage when they will often be encountered in groups. This is why you may get a cluster of seed ticks which can number in tens or even hundreds. Ticks are generally not found much higher than 500mm above the ground. They have specially adapted front legs to sense you and to grab onto you as you brush past. They will then walk around on you until they find a spot to feed. She (only females bite us) will then insert her mouth parts. Ticks undisturbed may feed for several days. As they feed they become engorged.

Female Paralysis Tick
(only female ticks bite us)

Engorged Female Paralysis Tick

Pathogens and illnesses

Tick borne pathogens include bacteria such as **'tick typhus'** or other substances such as the sugar which is the catalyst for the onset of **mammalian meat allergy**. Larger ticks are also much more likely to cause tick paralysis (more of a problem for very young children and animals) and to trigger direct allergic reactions.

Stephen advised that despite concern about and reporting of **Lyme disease**, the bacteria which causes it has not been identified in Australia in host populations (tick carrying animals like bandicoots, wallabies or dogs), in ticks themselves or in people. This is quite a contentious subject (as is clear from the Insight program) but Stephen was very clear and compelling about the matter from a scientific perspective. More information will be available via links in coming newsletters.

Allergic reactions are the most serious medical condition associated with ticks. These reactions can vary from a mild itching with localised swelling to widespread swelling with to a severe and life threatening anaphylatic condition. Unlike most other medical conditions associated with ticks, severe allergic reactions could occur with any tick stage but are more likely with larger ticks.

Mammalian meat allergy occurs when people bitten by a Paralysis Tick carrying the allergy catalyst, subsequently develop an anaphylactic reaction to consuming meats, dairy products and animal by-products such as gelatine. This syndrome has also been described overseas.

Repellents

Stephen advised that the most effective repellents are those that contain DEET (diethyl-meta-toluamide). His view is that as long as repellents are used correctly they are a safer alternative than tick bites. He identified a hierarchy of effectiveness for repellents as follows:

1. DEET based products (Such as Bushmans or Aerogard Tropical strength)
2. Picaridin based products (Such as 'Off')
3. PMD (concentrated oil of Lemon Eucalyptus) based products
4. Citronella based products
5. Other oils such as Melaleuca, Peppermint Oil etc

He also advised that it is very important that users check that the product they select:

- Be approved by Australian Pesticides and Veterinary Medicines Authority. The product will then have an APVMA number
- Have stated effectiveness against ticks on the container

Mosi-guard which is used by the school is a PMD based product and comes about half way down this hierarchy of effectiveness. It has an APVMA number (54125/100/0105) and is stated to be effective against ticks for up to 4 hours.

Tick Removal

The latest advice on tick removal is that Lyclear should be used on larval ticks and larger ticks should be frozen using 'wart off' or a similar product. Once the tick has been killed with the wart off, ideally it should be left to fall naturally. Most people are very uncomfortable with this and if the tick is dead it may be removed safely with tweezers. NEVER SQUEEZE THE BODY OF A TICK!!

Removal with tweezers, while safe if done correctly, is much more difficult as it is very important not to grasp the body of the tick and thereby squeeze more toxins back into the host. Fine tipped tweezers must be used and the tick grasped very low, near its mouthparts. If the attachment site is swollen and the tick engorged this is very difficult to do. This is why wart off is now recommended.

The current position of NSW Health is:

The Australasian Society of Clinical Immunology and Allergy (ASCIA) has recently recommended killing an adult tick in place by using an ether-containing spray to kill the tick by freezing it. These products are normally used for the treatment of warts and skin tags and are readily available from chemists.

This document (NSW Health Tick Fact Sheet) does not recommend this method until evidence-based research becomes available. When new evidence is published this document will be reviewed.

The school does not remove ticks but does now have Lyclear, Wart-off and tweezers for parents to use as they wish. We still advise that if you are not confident in removing ticks or the tick is difficult to remove, or **if your child has any known sensitivity to ticks or is showing signs of an allergic reaction – then the tick should be removed in a clinical environment.**

We thank Stephen Doggett for bringing his comprehensive knowledge to the school community.