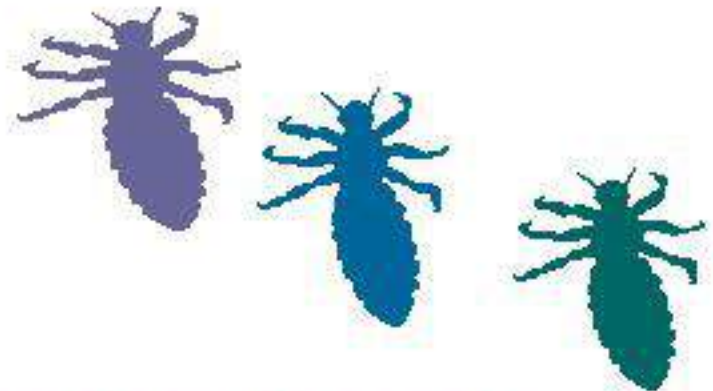




Treating and Controlling Head Lice



Dispelling the myths

Acknowledgement: The photographs and information contained in this presentation is from the work of Ass. Professor Rick Speare and the team of researchers at the School of Public Health & Tropical Medicine, James Cook University, QLD. Their website is : <http://www.jcu.edu.au/school/phtn/PHTMhlice>



Head lice problems

- Head lice problems occur **despite** parents trying to stop them
- Parents are given **poor and conflicting** advice and information
- These myths often come from trusted **sources**



Myths about head lice

- Kids with lice scratch or itch (50% don't)
- Lice jump or fly from head to head
- Lice live in carpets, beds, clothes and school buses



More myths ...

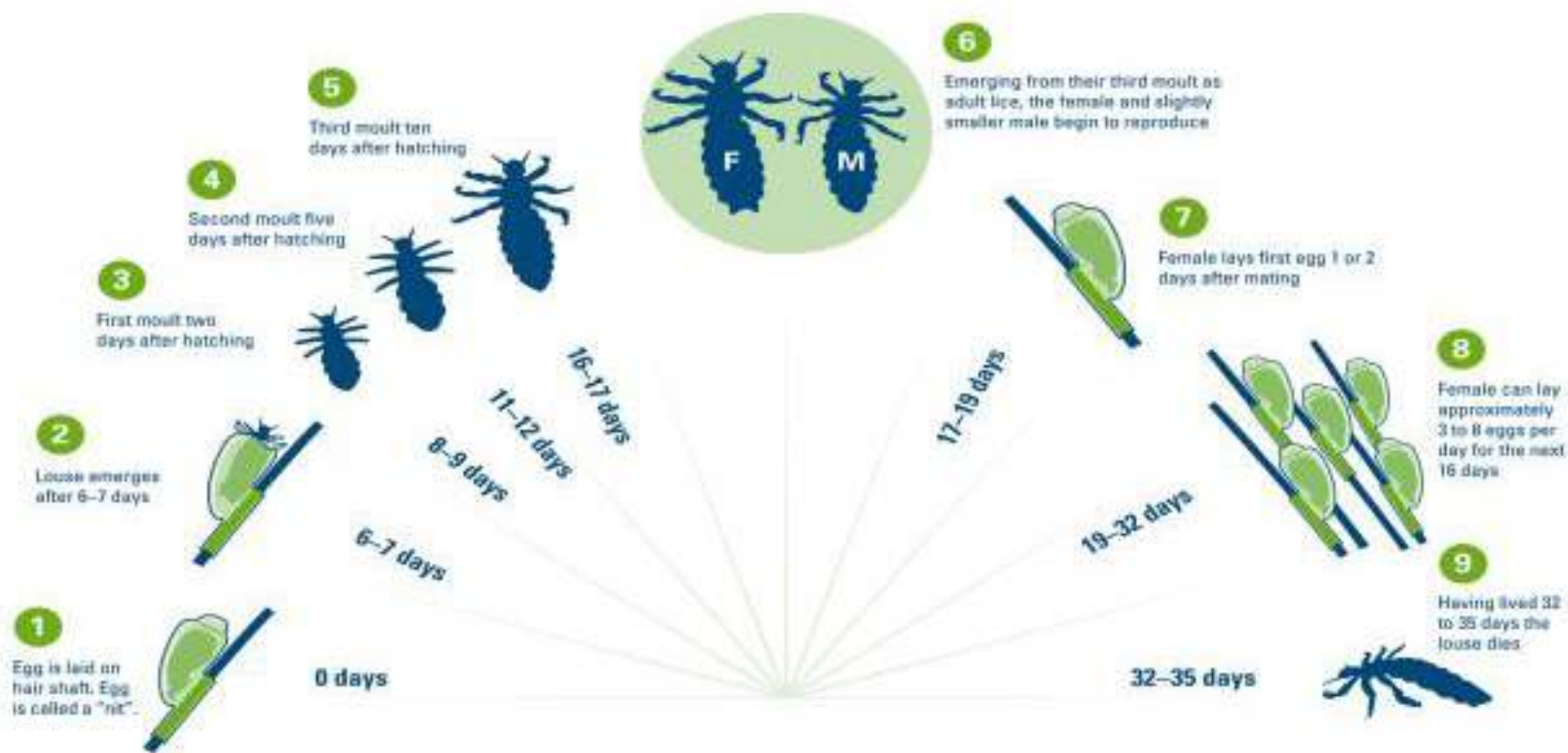
- One treatment is enough
- Everyone in the family should be treated
- Some products prevent head lice
- Head lice are selective about their home



Some facts

- Eggs are laid close to scalp
- Hatching at 6 or 7 days
- There are 3 nymph (baby) stages before maturity (adult) which is 10 days after hatching
- Lice live for about 30 days spending their entire life on the human head
- Females lay 3-8 eggs per day

The lifecycle of the head louse



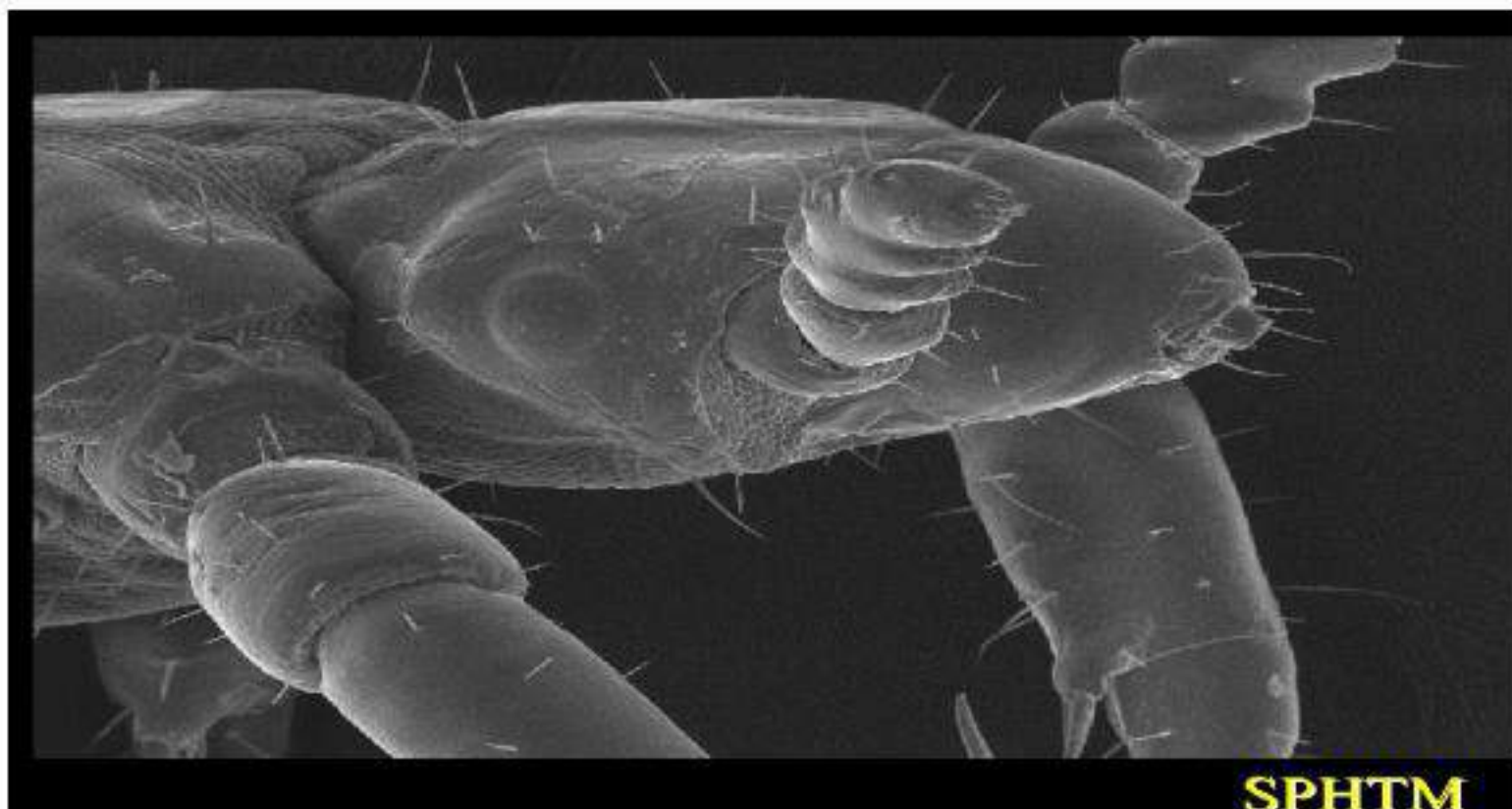


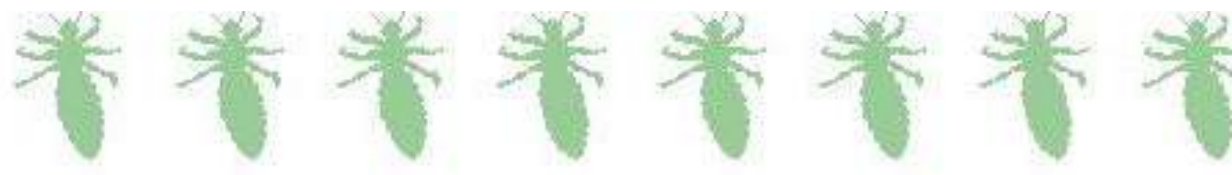
Feeding lice

- The only way lice get food and water is by sucking blood from your head
- They feed 3-4 times per day
- Well fed lice appear reddish-brown due to the human blood in the gut
- Hungry lice are pale (whitish-brown)



Unlike a mosquito, head lice have mouth which is hidden





More facts ...

- Head lice are easy to kill
- Water $> 60^{\circ}\text{C}$ for 10 seconds will kill all lice. (This is too hot for a shower or bath)
- In 2 schools with at least 50 cases, 1000 hats were checked and no lice were found
- In a primary school where 7000 head lice were found on children none were found on the carpet!

Head lice have six legs, each ending in a claw





The great escape

- Few lice ever fall off the head
- Those that do are probably about to die
- If healthy lice fall they die reasonably quickly, dehydrating at a rate dependant on humidity

For example:

- In Townsville - 24 hrs in the wet season
- 6 hrs in the dry season

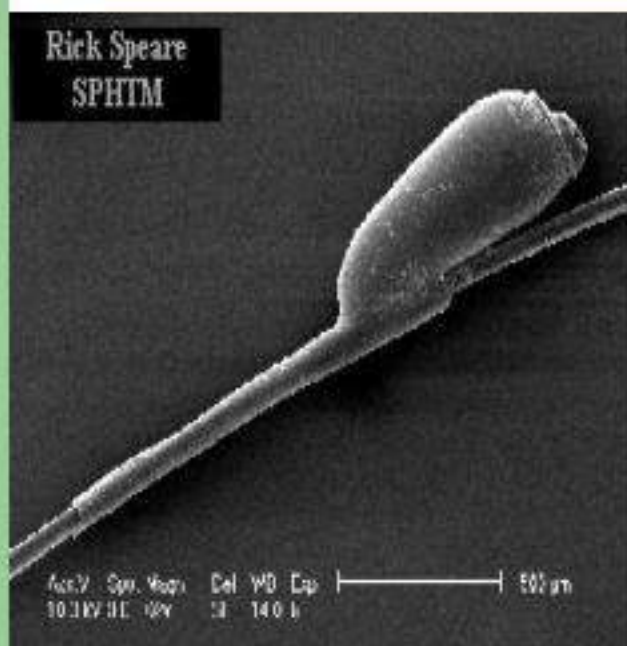


Head lice eggs (nits)

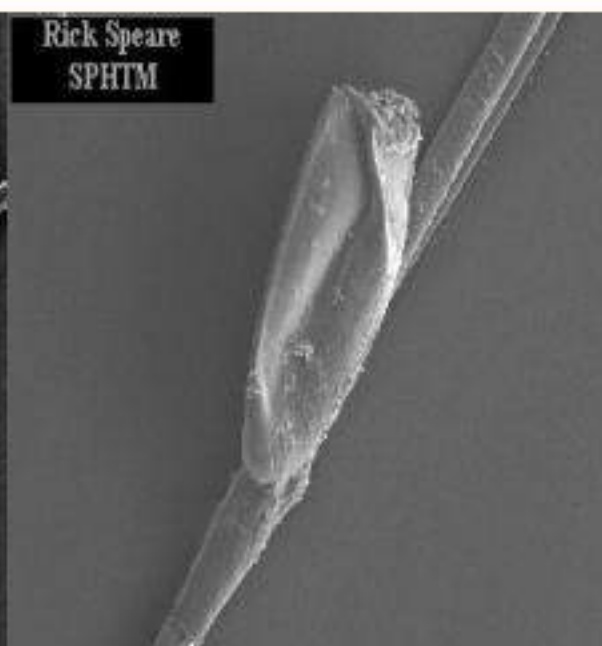
- It is helpful to be able to identify the eggs
- Sunlight or strong light and magnification may help
- If a child has empty hatched or dead eggs and **no live eggs or crawlers**, they do not have an active infection and **NO treatment is needed**



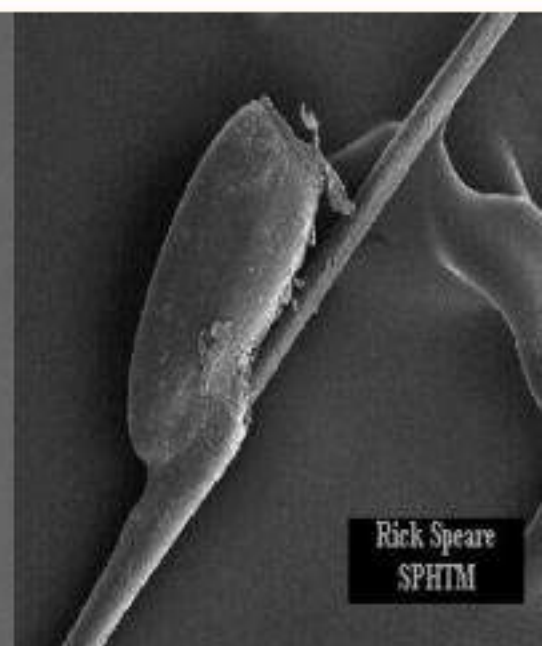
Louse eggs (nits)



Live eggs have curved walls and will pop when squeezed



Dead eggs have collapsed sides

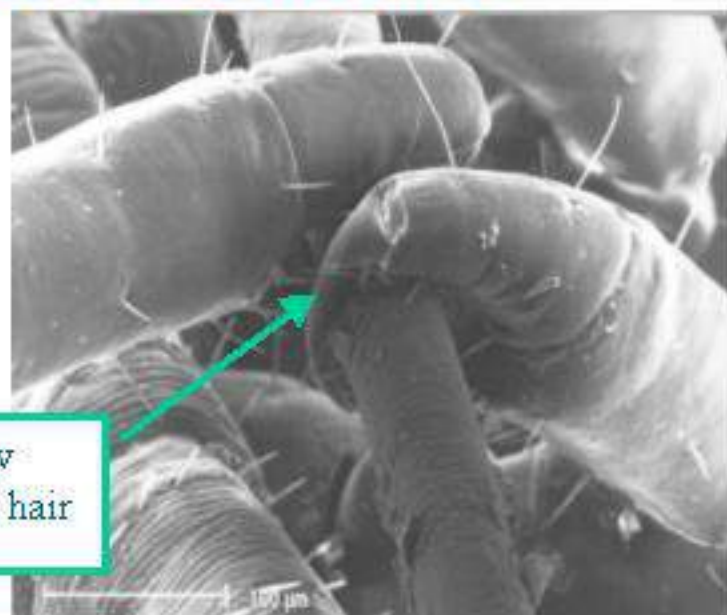
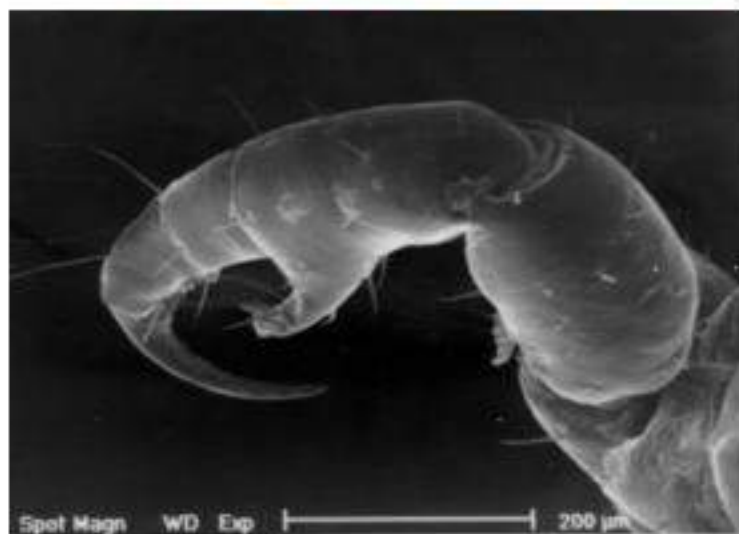


Hatched eggs have a flat top in profile



Head lice can be difficult to find

- When moving through the hair they run quickly both forwards and backward
- They sense vibration



Claw
holding hair



Steps for treating head lice

Step 1 (Detection)

- Comb hair conditioner on to dry hair
- Divide hair in small (3-4cm) sections
- Comb sections 3 or 4 times
- Look at the combings on to a tissue

Step 2 (Treatment)

- Either use a licensed or registered product or
- Use the conditioner and comb method every 2 days until no lice are found for 10 days



Treatment steps ...

Step 3 (Resistance)

- If an insecticide has worked the lice will be dead in 20 minutes
- After this time check
Are the lice moving?
No → the product **has worked**
Yes → the product **has not worked**

Step 4 (Retreatment)

- Re-apply the product seven days after the first treatment
 - You may see nymphs on the scalp between treatments
- For heavy infections, re-treat 7 days after the second treatment



What if the lice aren't dead?

- Lice resistance cannot be predicted
 - re-treat as soon as possible using a product from a different active chemical group.
 - many products use the same active chemical
- Follow the steps 1- 4 as before
- To optimise treatment remove as many eggs as possible



Nothing works

The four reasons for treatment failure:

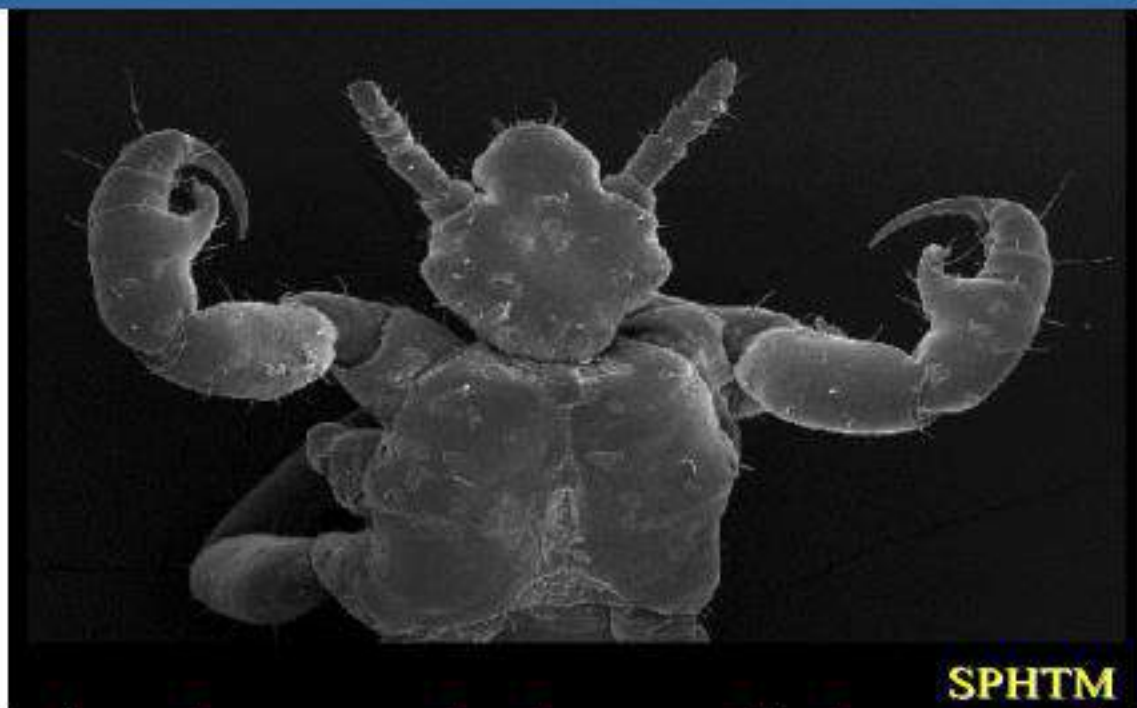
1. Inadequate application
 2. Lice are resistant to the chemical
 3. Failure to re-treat
 4. Re-infection
- If you are having difficulties you must **start at the top of the list and work down**



Remember these points

- Always check for head lice before you treat
- No treatment kills 100% of the eggs
- Re-treat 7 days after the first application
- Test to ensure the treatment has worked and change products if necessary
- Head lice can be controlled but it takes a systematic approach

Good luck and happy hunting



Remember keep a balanced view and don't put your child's health at risk