

people resort to household poisons to relieve persistent cases. A disproportionate amount of family time and money is wasted. Millions (pounds) are spent in each of the UK, USA and Australia on louse treatment annually (3).

Detection and removal of lice in some hairstyles is more difficult than previously thought. Our group has confirmed life-stage sizes as small as 0.6mm. Louse camouflage and various hair factors can cause false negatives and under-estimations. Without such knowledge, clinical product assessments are questionable (4).

Those who use a tiered diagnostic approach to screening have found that manual treatment is more successful than chemical. Fine-toothed combing is so helpful that it is one of the tools by which therapies are better assessed. Perhaps only head-shaving and microscopic examination are the gold standard (2, 3, 4).

Dry-hair parting with a lamp-magnifier can help practitioners to identify continuous egg deposition at the scalp-hair margin outwards of chronic cases. Old 'nit' removal facilitates examination. Patients who remove eggs may also find hidden lice. Further fine-combing may helpfully confirm the live lice (2, 3, 4).

Removed head lice are alive but probably less of a concern than direct transmission or unrecognised relapses. Longer or thicker hair impedes detection and removal of resistant infestations. Hair-shortening improves comfort and access to residual lice. Pediculosis is not self-limiting and undetected failures (some relapsing monthly for years) are common in longer hair of girls (3).

Lice can transfer instantly across hair tresses with a vigorous rub. Severely neglected head lice may also bite further down the body. New biological findings place head and body lice in the same species. Body lice carry typhus, relapsing fever and trench fever, which are reemerging overseas. We suggest that pediculicides should be reserved to assist with control of such outbreaks. Lack of thorough screening and treatment will allow more resistant lice to proliferate (5).

(1) 1. Nash B. Treating head lice BMJ 2003; 326: 1256-8.

(2) Bailey AM, Prociv P. Persistent head lice following multiple treatments: Evidence for insecticide resistance in *Pediculus humanus capitis*. *Australas J Dermatol* 2000; 41: 250-54.

(3) Bailey AM, Prociv P. *Pediculus humanus capitis* infestations in the community: A pilot study into transmission, treatment and factors affecting control. *Australian Infection Control* 2001; 6: 95-101.

(4) Bailey AM, Prociv P. Head lice appearance and behaviour: implications for epidemiology and control. *Australian Infection Control* 2002; 7: 62-71.

(5) Bailey AM, Prociv P, Petersen HP. 2003. Head lice and body lice: shared traits invalidate assumptions about evolutionary and medical distinctions. *Australian Journal of Medical Science* 2003; 24: 48-62.

Competing interests: None declared



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Send response to  
journal:

[Re: Another  
misapprehension](#)

While we are educating school nurses and teachers not to become hysterical about head lice and try not to over treat it, submit children to humiliating "lice checks," and send children home until all the nits are gone, can we educate them about "pink eye" as well? Why are children sent home, not to return until treated. First, it is very contagious, but it has already been spread by the time the child has it. Second, it is viral. There is no treatment that does anything except mollify the school system. Let's send the kids back to school with pink eye, and save everyone trouble.

Competing interests: None declared

## Re: Exclusion from schools and nurseries

13 June 2003



Theo Fenton,  
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*Mayday Hospital,*  
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Send response to  
journal:

[Re: Re: Exclusion  
from schools and  
nurseries](#)

Dear Sir,

The UK Public Health Laboratory Service produced some excellent evidence-based guidelines a few years ago. Unfortunately, few teachers/school nurses seem to be aware of them. I keep a copy in my car, and my affected son clutches the relevant page when I drop him at nursery.

The guidelines are at: [http://www.phls.org.uk/%5Ctopics\\_az/schools/schools.pdf](http://www.phls.org.uk/%5Ctopics_az/schools/schools.pdf)

Conjunctivitis is discussed on page 5, and head lice on page 20.

Competing interests: None declared

## Conditioner and comb works for us

21 June 2003



Karen M Dacy,  
parent  
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Send response to  
journal:

[Re: Conditioner and  
comb works for us](#)

As a parent, I have spent an inordinate amount of money on Permethrin, Lindane and Malathion based products and have on more than one occasion, after following instructions conscientiously, combed live, healthy adult lice out of my childrens' hair immediately following the recommended treatment time.

Out of curiosity and desperation I put some live lice under a microscope and saturated them in each of the products, then undiluted lemon juice, tea-trea oil and methyated spirits (different lice, separate trials).

After 10 minutes not one was dead.

Conditioner killed the lice within a couple of minutes, as did olive oil.

My point is this: what works in one case is difficult to prove for populations, given the variables in how the method is applied. It appears to my family that death by suffocation (as I believe is the cause with oil -based products) is the most effective as long as every louse is found and killed before reproductive age, and if reinfection can be prevented. In many cases I personally suspect that reinfection takes place almost immediately after treatment, thus it appears the method was ineffective.

My treatments regularly appear to be "ineffective" during term time, but during the school holidays all evidence of lice disappears within 10 days of treatment.

Furthermore, it is difficult to see how head lice will develop a resistance to suffocation, hence oil based treatments pose a lesser threat to the community in the future.