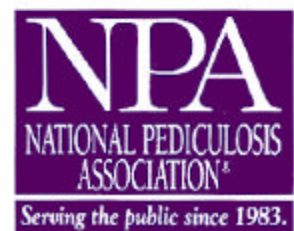


The National Pediculosis Association® recommends the No Nit Policy as the public health standard intended to keep children lice free, nit free, and in school.

# THE NO NIT POLICY

A Healthy Standard For  
Children And Their Families

Pediculosis represents one of the most common communicable childhood diseases and whether or not we understand how this has evolved, it is important to acknowledge head lice as a problem when raising or caring for children. We can begin to improve the current situation by assuring that the health programs of every school, camp and child care facility operate with an acceptable head lice management protocol.



***The Spirit of the No Nit Policy is to minimize head lice infestations as a public health problem and to keep children in school.***

## **ESTABLISHING CONSISTENT GUIDELINES**

The No Nit Policy encourages each family to do its part at home with routine screening, early detection, accurate identification and thorough removal of lice and nits. Establishing consistent guidelines and educating the public about procedures in advance of outbreaks helps minimize inappropriate responses.

Early intervention provides the needed assurance for those who have successfully eliminated an infestation that everything possible is being done to prevent new outbreaks when children return to groups where close contact is inevitable. Repeated exposures to pesticidal products put children at risk. Parents need to be informed that chemical treatments may also be dangerous for children with certain pre-existing medical conditions and/or medication regimens. Families with pregnant or nursing mothers should be given advance notice that early detection with manual removal of lice and nits can serve as a safe alternative to pesticidal lice treatment products.



## **WHY THE CONTROVERSY?**

Opponents of the No Nit Policy say that "overzealous" enforcement can lead to inappropriate exclusion of children with residual nits, but whose infestation has otherwise been "treated." Those who judge enforcement to be "overzealous" may not consider the broader public health values and preferences of the community. Few who oppose the No Nit Policy would accept infestations for themselves or for their own children.

Without the No Nit Policy, communities are left with a hit-or-miss approach. Indifference about adopting a standardized management protocol permeates the attitudes of health professionals at every level. This in turn gives way to a maze of conflicting opinions and directives that are counterproductive. Public health policies for head lice cannot be based solely on the use of chemical remedies.

The Food and Drug Administration recommends repeating chemical treatments in 7-10 days because none of the available treatment products are 100% effective against lice eggs and that remaining viable nits will hatch lice. Unfortunately, the FDA's directive does not take into consideration the endemic nature of head lice. Children being managed in this manner can infest others or become reinfested in the interim. Mechanical removal of head lice and nits is less noxious and more likely to be successful than repeated chemical treatments.

## **EMPHASIZE PREVENTION**

Promote community participation and awareness by promptly informing all parents when there is a case of head lice. Here is a sample letter to parents:

*"A case of head lice has been reported in your child's group. Head lice continue to be one of the most prevalent communicable childhood diseases among children, and outbreaks are possible whenever and wherever children gather. Screen your child regularly and notify us immediately if head lice or their nits (lice eggs) are detected. (We welcome the opportunity to teach those of you who do not know how to check your child for head lice). Working together helps protect all of the children, including your own. Thank you for your cooperation."*

## STRATEGIES THAT WILL MAKE THE NO NIT POLICY SUCCEED

- 1) Proactive Community Education:** The community is given a baseline understanding of the louse, modes of transmission and the importance of safe and effective control measures. Information sharing targets everyone in the circle of responsibility for children -- from parents, siblings, friends and neighbors to school nurses, teachers and principals, to pharmacists, physicians, product manufacturers and government agencies.
- 2) Routine Screening and Early Detection:** Vigilant screening of children for head lice and nits plays a pivotal role in pediculosis management. Early detection offers the best opportunity to manually remove head lice and nits without pesticide exposure. This directive is consistent with traditional preventive medical and communicable disease control methods.
- 3) Manual Removal of All Lice and Nits:** There are no safe pesticides, "natural" or otherwise, scientifically proven to be 100% effective against head lice, nits or nit glue. Reliance on head lice treatment products that are ineffective promotes repeated use of potentially harmful chemicals and contributes to ongoing infestations, outbreaks, and resistant strains of head lice.

Parents should be discouraged from spending unnecessary time and money on "concoctions" for which there is no scientific basis for claims or evidence of efficacy and human safety. A wide variety of such "lice remedies" are vigorously marketed to consumers especially via the Internet. The result is more confusion for families already deluged with conflicting treatment recommendations. Manual removal is the safe alternative and necessary component to any head lice treatment regimen.

- 4) Temporary Dismissal of Children with Head Lice and/or Nits:** Administrators and health personnel must take all reasonable measures to help ensure that infested children do not join the group setting. It is more than fair to expect that uninfested children will be safeguarded while infested children will be cared for with sensitivity. Monitoring with enforcement through scheduled and announced group screenings encourages parental compliance and promotes community cooperation and individual accountability. This does not mean panicked emergency pick-ups. The goal is to avert a crisis mentality by enabling families to keep their children lice and nit free.

There are practical approaches that include readmitting children whose parents have done an excellent job of nit removal but may have missed a single nit. This nit should be removed immediately, a step that both supports the No Nit Policy and allows the child to return to class.

## HEAD LICE AREN'T ALL BAD NEWS

Head lice provide an early opportunity to teach children responsible personal health behaviors. Children can learn communicable disease prevention concepts in a meaningful way and learn to take responsibility for their actions. It is vital that we build consistent and positive public health messages for children who mature into a world of behavior-related health threats including alcohol, drugs and AIDS.

## ADMINISTRATIVE ADVANTAGES OF THE NO NIT POLICY

Having the No Nit Policy in place makes the task of the staff of the school, camp, or child care facility more realistic and less subjective. If nits are present upon screening or re-screening, the child is dismissed for follow-up. As an administrative policy, it helps parents understand and assume their responsibility for head lice control. Families are encouraged to respond by carrying out the most effective prevention measures at all times and the safest most thorough control measures possible. For the child whose family is unable, for whatever reason, to comply with the policy, the "system" must go the extra mile to ensure the child is able to return to their group lice and nit free. The reward is an environment of *mutual assurance* that the child enters a group setting that supports a head lice control program.



## MEDICAL AND SOCIAL ADVANTAGES OF THE NO NIT POLICY

- Prevents continuing infestations caused by the surviving and hatching of nits.
- Maximizes the opportunity to eliminate repeated chemical treatments aimed at killing head lice that hatch from remaining viable nits.
- Eliminates confusion -- *Were these eggs here before or do they represent a new infestation?*
- Contributes to improved standards of personal hygiene and self-esteem, protecting children from ridicule and rejection.
- Enhances uninterrupted class time for the majority of the children and prevents lost days at work that can be costly for parents.

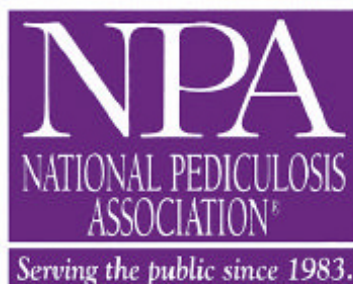
---

Nurses cited non-removal of nits as one of the primary causes of treatment failure. With nit removal absent from school policy, children with hatching nits are readmitted to the group setting. Still there are many, perhaps more distant from the front lines, who dispute the value of removing nits. This opposition is based on a reliance on chemical agents rather than a preventive approach, a belief in second and *even third* pesticide treatments as "mop-up" operations and the notion that pediculosis is not a significant disease.

In 1990, the NPA published a warning to the public that resistant strains of head lice were inevitable based on the way the products were being vigorously marketed and inappropriately used. Again in 1995, the NPA notified leading manufacturers of both permethrin and pyrethrin-based pediculicides that the NPA was receiving increased numbers of treatment failure reports from parents and health professionals alike, indicating possible lice resistance to some of these products.

In 1996, the NPA sponsored independent scientific evaluations of head lice sensitivity which documented permethrin-resistant head lice from children in Massachusetts, Iowa, and Washington. In 1997, the World Health Organization review of treatments for pediculosis noted the issue of lice resistance to almost all of the commercially available pesticide treatments including permethrin-based products. As recently as February 1999, the Journal of Parasitology reported lice resistance in England, following in the footsteps of journal reports from Israel, Czechoslovakia, France and the U.S. Resistance issues alone warrant that people be reminded in advance that products may not provide the positive outcome they seek. Repeated use of these products will not change product performance and may risk children's health and contribute to more strains of resistant lice.

While absence from school or child care is a loss of educational opportunity and an encumbrance to working parents, readmitting an infested child is not the solution. A policy for head lice must consider not only the infested child, but also his or her peers who have already been successfully deloused or who have not yet been infested. All this considered, the No Nit Policy remains a sensible approach that sets the standard to serve and protect all the children in the group.



**1005 Boylston St., Ste 343  
Newton, MA 02461  
617-905-0176 npa@headlice.org**

## References

- I. The Need for Education and Strategy
- II. A No Nit Policy is A Sound Policy
- III. Combing Technique Proves More Effective than Chemical Treatment
- IV. General Pesticide Resistance
- V. Permethrin Resistance
- VI. Lindane Resistance
- VII. Malathion Resistance
- VIII. Carbaryl Resistance
- IX. Phenothrin Resistance
- X. Head Lice and Disease

### I. The Need for Education and Strategy:

1. Pediculosis prevention and control strategies of community health and school nurses: a descriptive study.  
J Community Health Nurs. 1991;8(2):85-95.  
PMID: 2033411 [PubMed - indexed for MEDLINE]  
Donnelly E, Lipkin J, Clore ER, Altschuler DZ.
2. Donnelly, E, et al., *Pediculosis Prevention and Control Strategies of Community Health and School Nurses: A Descriptive Study*, Journal of Community Health Nursing, 1991.
3. Truding, R, Altschuler, D., *What Families Should Know About Head Lice*, Pediatric Management, July, 1991.
4. Head lice in pupils of a primary school in Australia and implications for control.  
Int J Dermatol. 1999 Apr;38(4):285-90.  
PMID: 10321945 [PubMed - indexed for MEDLINE]  
Speare R, Buettner PG.
5. Head lice for A & E nurses.  
Accid Emerg Nurs. 2000 Apr;8(2):84-7.  
PMID: 10818373 [PubMed - indexed for MEDLINE]  
Hadfield-Law L.
6. Head lice are not found on floors in primary school classrooms.  
Aust N Z J Public Health. 2002;26(3):208-11.  
PMID: 12141614 [PubMed - indexed for MEDLINE]  
Speare R, Thomas G, Cahill C.

### II. A No Nit Policy is A Sound Policy:

1. From eradication to resistance: five continuing concerns about pediculosis.  
J Sch Health. 1998 Apr;68(4):146-50. Review.  
PMID: 9644607 [PubMed - indexed for MEDLINE]  
Brainerd E.
2. School nurses' perceptions of and experiences with head lice.  
J Sch Health. 1999 Apr;69(4):153-8.  
  
PMID: 10354985 [PubMed - indexed for MEDLINE]  
Price JH, Burkhart CN, Burkhart CG, Islam R.
3. Pediculosis in a school population.  
J Sch Nurs. 2000 Aug;16(3):32-8.  
PMID: 11885087 [PubMed - indexed for MEDLINE]  
Estrada JS, Morris RI.

### III. Combing Technique Proves More Effective than Chemical Treatment:

1. Head lice infestation: bug busting vs. traditional treatment.  
J Clin Nurs. 2001 Nov;10(6):775-83.  
PMID: 11822849 [PubMed - indexed for MEDLINE]  
Plastow L, Luthra M, Powell R, Wright J, Russell D, Marshall MN.

#### **IV. General Resistance:**

1. Altschuler, D., Kenney, L., *Comments: Pediculosis: Treatment and Resistance*, Advances in Dermatology, Year Book Publishers, Inc. , 1986, pg. 123.
2. Gratz N. Human Lice: their prevalence, control and resistance to insecticides-a review 1985-1997. 1997, WHO/CTD/WHOPES/97.8.
3. Downs, AMR, et al. Head lice: Prevalence in schoolchildren and insecticide resistance. 1999, *Parasitology today*, 15, 1:1-3.
4. Dawes, M, et al. *Evidence based case report*, Treatment for head lice. *BMJ* 1999; 318:385-6.
5. Head lice resistance: itching that just won't stop. *Ann Pharmacother*. 2001 Jan;35(1):109-12.  
PMID: 11197569 [PubMed - indexed for MEDLINE]  
Bartels CL, Peterson KE, Taylor KL.
6. Widespread insecticide resistance in head lice to the over-the-counter pediculocides in England, and the emergence of carbaryl resistance.  
*Br J Dermatol*. 2002 Jan;146(1):88-93.  
PMID: 11841371 [PubMed - indexed for MEDLINE]  
Downs AM, Stafford KA, Hunt LP, Ravenscroft JC, Coles GC.

#### **V. Permethrin Resistance:**

1. Burgess IF; Head lice resistant to pyrethroid insecticides in Britain [letter] *BMJ*, 1995 Sep 16.
2. Mumcuoglu KY, et al. Permethrin Resistance in the head louse *Pediculus capitis* from Israel. *Med Vet Entomol*. 1995 Oct.
3. Rupe SV, et al. A Resistance of head lice (*Pediculus capitis*) to permethrin in Czech Republic. *Cent Eur J Public Health*, 1995 Feb.
4. Robert P. et al. Resistance of lice to insecticides: a serious public health problem. *Can J Public Health*, 1995 Jan-Feb.
5. Schachner LA; Treatment resistant head lice: alternative therapeutic approaches. *Pediatr Dermatol*, 1997 Sep-Oct.
6. Estrada, B; Head Lice: What about Ivermectin? *Infect Med* 15 (12):823, 1998.
7. Bell, TA; Treatment of *Pediculis Humanus* Var. *Capitis* Infestation in Cowlitz County, Washington, with Ivermectin and the LiceMeister® Comb. *Pediatr Infect Dis J* 17:923-924, 1998.

#### **VI. Lindane Resistance:**

1. Vander Stichele RH, et al. Systemic review of clinical efficacy of topical treatments for head lice. *Brit Med J*, 1995, 311:604-608.
2. Maunder JW. Strategic aspects of insecticide resistance in head lice. *J Roy Soc Hlth*, 1991, 111(1):24-26.
3. Armed Forces Pest Management Board 1994. DoD use of lindane discontinued. *Tech Info Bull*, 1994, p.1.

#### **VII. Malathion Resistance:**

1. Burgess I. Malathion lotions for headlice - a less reliable treatment than commonly believed. *Pharmaceutical J*, 1991, 247:630-632.
2. Izri MA, Briere C. Premiers cas de resistance de *Pediculus capitis* Linn 1758 au malathion en France. *La Presse Med*, 1995, 1995, 24(31):1444.
3. Evidence for double resistance to permethrin and malathion in head lice.  
*Br J Dermatol*. 1999 Sep;141(3):508-11.  
PMID: 10583056 [PubMed - indexed for MEDLINE] Downs AM, Stafford KA, Harvey I, Coles GC.

#### **VIII. Carbaryl Resistance:**

1. Burgess I. Malathion lotions for headlice - new laboratory tests show variations in efficacy. *Pharmaceutical J*. 1990, 245:159-161.
2. Widespread insecticide resistance in head lice to the over-the-counter pediculocides in England, and the emergence of carbaryl resistance.  
*Br J Dermatol*. 2002 Jan;146(1):88-93.  
PMID: 11841371 [PubMed - indexed for MEDLINE]  
Downs AM, Stafford KA, Hunt LP, Ravenscroft JC, Coles GC.

#### **IX. Phenothrin Resistance:**

1. Chosidow O, et al. Controlled study of malathion and d-phenothrin lotions for *Pediculus humanus* var *capitis*-infested school children. *Lancet*, 1994, 344:1724-1727.
2. Burgess I. Head Lice resistant to pyrethroid insecticides in Britain. *Brit Med J*, 1995, 311:752.

#### **X. Head Lice and Disease**

1. HEAD LICE AS VECTORS OF DISEASE  
Communication to US Military Pest Management Board  
L. Lance Sholdt, PhD, 1993.  
<http://www.headlice.org/news/classics/vectors.htm>
2. Zinsser, Lice And History; Lice & Disease, 1990.  
<http://www.headlice.org/faq/disease/zinsser.htm>
3. Zinsser H: Rats, Lice, and History. Boston, MA: Little, Brown, & Co., 1935.