

GUIDANCE ON HEAD LICE PREVENTION AND CONTROL FOR SCHOOL DISTRICTS AND CHILD CARE FACILITIES

This guidance is provided to assist local health departments, elementary schools, preschools, and child care facilities in developing policies and procedures for the care of children found to have head lice. The California Department of Public Health (CDPH) recommends that schools and childcare facilities maintain an active educational campaign for parents on the accurate diagnosis and proper treatment of head lice cases to prevent transmission of lice in schools and reduce lost school days due to head lice infestation.

Head lice, while a significant social problem, do not transmit disease to humans. Traditionally, head lice policies in schools emphasized that a child infested with head lice could not return to school until no nits were found in their hair (“no-nit” policy). There is no evidence that a no-nit policy prevents or shortens lengths of outbreaks (Pollack et al., 2000, Williams et al., 2001). The American Academy of Pediatrics, the National Association of School Nurses, and the Centers for Disease Control and Prevention are all opponents of no-nit policies (Frankowski and Weiner, 2002; Schoessler, 2004). Furthermore, the “International Guidelines for Effective Control of Head Louse Infestations” state that “the no nit policy is unjust as it is based on misinformation rather than objective science and should be discontinued.” (Mumcuoglu, 2007) CDPH recommends a no-lice policy.

The essential components of a no-lice policy are the following:

- ◆ Early detection of head lice infestations through routine screening by parents and/or caregivers
- ◆ Treatment of children found to have live lice
- ◆ Distribution of educational material to school staff and parents on head lice, nit combing, and treatment such as “A Parent’s Guide to Head Lice” brochure (available at local health departments and online:
<http://www.cdph.ca.gov/HealthInfo/discond/Documents/headlice2008Eng.pdf>)

Adult head lice are grey or brown, wingless insects approximately 1/8 inch in length. Adult females lay eggs (nits) by gluing them to the hairs near the base. Lice do not fly or jump and can be detected by parting the hair and examining near the scalp, most commonly near the ears and the back of the neck. Wetting the hair before combing has been shown to be a helpful method in diagnosing an active lice infestation (Jahnke, 2009). Children ages 3-11 years old are at highest risk for head lice infestation.

DETECTION OF HEAD LICE. There is a lack of evidence showing that routine class or school-wide screening reduces lice infestation rates (Frankowski, 2010). Moreover, many schools now lack the resources to do routine lice checks. Parents should check

their children for lice regularly. If lice are seen on a child at school the parents should be called to pick up the child at the end of the school day and be given a copy of the brochure "A Parent's Guide to Head Lice". At home, all members of the family must be checked for head lice. This policy allows the parent to treat the child overnight. The day following treatment, the child should be re-examined and admitted to class. If the child is still infested, then the parent should be re-contacted.

While classroom or school-wide notification is not recommended after head lice have been detected in a student, this policy is at the discretion of the school nurse or administration.

CHRONIC CASES. If a child is found repeatedly infested with head lice for six consecutive weeks or in three separate months of the school year, the child should be deemed to have a "chronic" head lice case. It is important for schools to identify these children since their continuing infestations may signify other family or socioeconomic problems. These chronic cases should be reported to the school attendance review board and be addressed by a multidisciplinary work group. The work group could consist of representatives from the local health department, social services, the school (district) nurse, and other appropriate individuals to determine the best approach to identifying and resolving the family problems that impact the child's chronic louse infestation and school attendance.

ENVIRONMENTAL CONTROL. Adult lice will die within two days without a blood meal. In a classroom where head lice are found; actions should be taken if possible to reduce head-to-head contact (Frankowski, 2010). Always keep each child's hat and other clothing on separate hooks and hang each child's coat on the back of their chair.

Pillows and other classroom items may have nits or lice on them but are unlikely sources of infestation. These items can be put in a dryer and run on hot for 20 minutes, vacuumed, or placed in sealed plastic bags for two weeks to kill hatching lice (nits take six to nine days to hatch and are unlikely to hatch away from the scalp). Vacuuming infested classrooms once a day until no children have lice can decrease the remote possibility of lice transmission from the environment.

At home, bed linens should be laundered (Burkhardt, 2006, Meinking, 1999). Pesticide application to the school or home environment is not recommended.

TREATMENT. Parents need to understand that the most important components of head lice control are a single treatment with one of the following treatments, then reapplication if live lice are found seven to ten days later. Nit combing should also be performed. Head lice that are resistant to some of the commonly used insecticides in head lice shampoos have been found in California and therefore not all lice may be killed by treatment. Combing and removal of nits may help to reduce the duration of infestation. CDPH recommends the combination of treatment and nit combing. Several brands of nit combs are available at local pharmacies. Flea combs also work well for nit

combing and can be bought at pet stores. Sometimes it may seem that the treatment used has failed when actually there may have been: 1) misidentification of substance on the hair shaft as nits (i.e. dandruff, styling products, etc.), 2) re-infestation, 3) inadequate treatment (used too little product), or 4) no knowledge that it may take 8-12 hours for lice to die after treatment.

Permethrin (i.e. Nix®) and pyrethrin treatments may be used to kill live lice but may need to be used again one week later to kill resistant or newly hatched lice. Studies of head lice in California indicate that some lice populations are resistant to permethrin (Gao et al., 2003; Yoon et al., 2004). However, there are now non-permethrin based products available for head lice control.

Benzyl Alcohol Lotion (5%) (i.e. Ulesfia®) is a prescription medication for the treatment of head lice in patients 6 months of age and older. However, Benzyl alcohol does not kill nits and treatment should be repeated in 7 days to kill emerged lice (Frankowski, 2010; Meinking, 2010).

Ovide® (0.5% Malathion) is available by prescription. Ovide is an effective product to kill lice and their nits on children 24 months of age and above. Ovide is flammable so parents must not use hairdryers or smoke when applying this product (Meinking et al, 2001; Meinking et al, 2002; Frankowski, 2010).

Spinosad (0.9%) (Natroba ®) is a prescription treatment for children 4 years of age and above. Spinosad is derived from a soil-dwelling bacterium and works to “over-stimulate” lice and nits into paralysis and death (McCormack, 2011).

Sklice® (0.5% Ivermectin) is a prescription treatment for children 6 months of age and above. Ivermectin is derived from a soil bacterium and causes paralysis and death in lice and nits.

The Lousebuster® is a device designed to deliver heated air at high flow to the scalp and hair to kill lice and nits. Treatment takes 30 minutes (Bush, 2011).

There is no conclusive scientific evidence to support the use of products such as vinegar, isopropyl alcohol, enzyme-based compounds, tea tree oil, or other alternative products advertised to dissolve the glue on the nits (to ease their removal) or kill the nits. Similarly, there are no conclusive scientific data to support claims that mayonnaise, olive oil, melted butter, petroleum jelly, or other alternative products on the hair “suffocate” the nits and lice. Drowning lice is also an ineffective way to kill lice (Takano-Lee et al., 2004). Natural products (i.e. herbal products) are not regulated for safety by the U.S. Food and Drug Administration.

Please contact your local health department for more information. The list of references cited in this document is attached. These guidelines, the brochure “A Parent’s Guide to Head Lice” (in English and Spanish) and other CDPH publications can be found on the

California Department of Public Health Head Lice webpage:
<http://www.cdph.ca.gov/healthinfo/discond/Pages/HeadLice.aspx>

*Use of this product name does not imply commercial endorsement by the California Department of Public Health

Recommendations by state and federal experts and existing standards of practice outlined in this document are intended to provide guidance to individuals and agencies involved with head lice prevention and control in California. The information provided in this document are recommendations provided for informational purposes only and are not intended to be regulatory in effect.

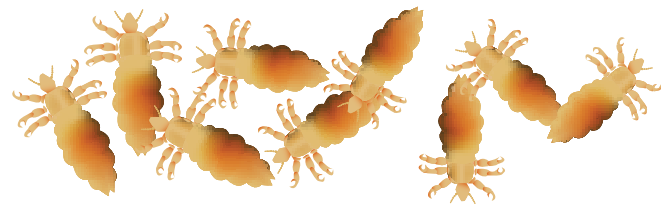
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If you have questions, contact your local health department or clinic



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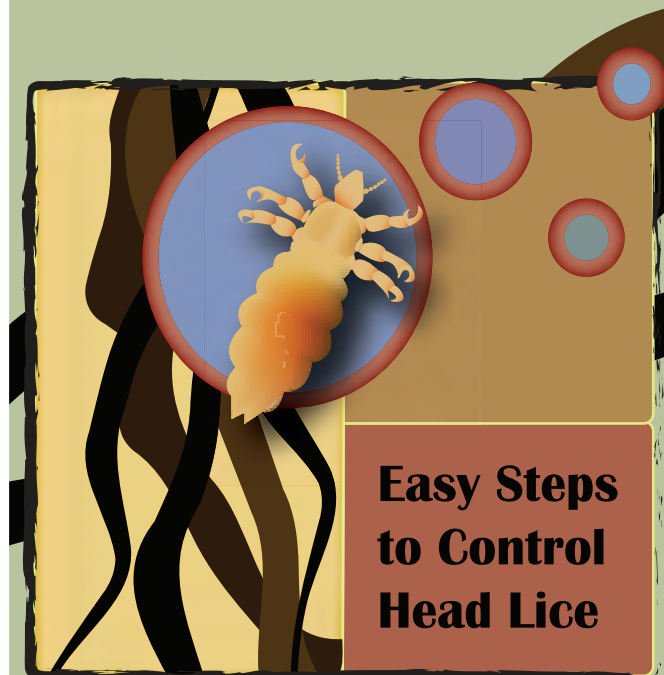
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A PARENT'S GUIDE TO HEAD LICE



What are head lice?

Head lice are small insects that live in people's hair and feed on their blood. Lice glue their eggs, or "nits," to hair.

Head lice die quickly (within two days) without feeding so they cannot live very long away from your child's head.

Eggs take six to nine days to hatch, and seven or more days for the lice to become egg-laying adults.

How do people get head lice?

Children can give head lice to other children from head-to-head contact and when they share combs, hats, clothing, barrettes, helmets, scarves, headphones, or other personal items.

Head lice are a problem in homes, day care centers, elementary, and preschools. Children are much more likely to get lice from family members and playmates than from classmates at school.

How do I know if my child has lice?

The only way to know if your child has lice is to look through their hair. If your child has head lice, their scalp might be itchy.

Don't confuse dirt or dandruff with eggs (nits). Eggs stick on the hair.

How can I get rid of my child's lice?

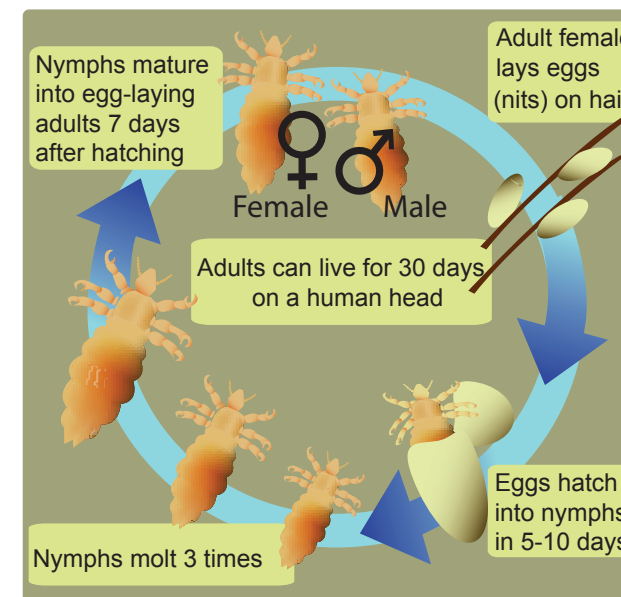
Nit combing and removal

If your child has head lice, a good way to get rid of the lice is to comb their hair every day with a nit comb for two weeks.

Nit combs should be metal (not plastic) and have long teeth. Several brands of nit combs are available at your local pharmacy.

A good example is the LiceMeister®* metal comb that costs about \$10. Metal flea combs found at pet stores may be used as well.

Development of Head Lice



The best way to remove eggs is to part the hair into small sections. As each section is combed, fasten the hair to the scalp to keep track of what has been combed. It is easier to comb wet hair.



Any eggs that cannot be combed out must be removed. You can do this by picking them out with fingernails or by cutting a single hair between the scalp and where eggs are attached.

Check all family members' hair completely. Common places to find lice are close to the scalp, the neckline, and behind the ears.



Treatments



Permethrin (Nix®) or pyrethrin are the active ingredients in most over-the-counter head lice treatments.

Benzyl Alcohol lotions (5%) such as Ulesfia® can be prescribed to kill lice on children 6 months and older.

Ivermectin (0.5%) treatments such as Sklice® can be prescribed to kill eggs and lice in children 6 months of age and above.

Spinosad (0.9%) treatments such as Natroba® can be prescribed to kill both lice and eggs on children above 4 years old.

The Lousebuster® is a device that delivers heated air at high flow to the scalp to kill lice and eggs.



VERY IMPORTANT TREATMENT INFORMATION:

- Follow the label directions carefully.
- Treat only people who have head lice.
- Do not leave the product on for a longer time than recommended; it will not kill the lice faster.
- Each person with head lice needs a complete treatment. Do not split a single box of shampoo or rinse between people.
- Even after treatment, you should remove eggs daily with a metal nit or flea comb until all eggs are completely removed.



- Wait at least seven to ten days before treating someone for a second time if they still have lice. During this seven to ten day period, continue to remove any lice and eggs found.

What if the treatment did not work?

Here are a few reasons the treatment might not have worked:

- The directions on the treatment product were not followed closely enough.
- The nits were not completely removed.
- The child got head lice again from a playmate.
- Lice may not die right away.
- The problem was not lice.

There is NO proof that the following products work:

- Vinegar
- Compounds that say they dissolve the glue on the nits "to ease their removal."
- Mayonnaise
- Olive oil
- Tea tree oil



Here are a few other things you can do to get rid of the lice or nits in your home

- Wash clothing and bedding in hot water (130°F) then dry on a hot cycle for at least 20 minutes.



- Seal items in a plastic bag for two weeks to kill lice because they cannot get a blood meal.
- Boil combs, brushes, hair bands, and barrettes in water for five minutes, or soak them in rubbing alcohol or Lysol® for one hour.
- Vacuum carpets and furniture.



* Use of this product name does not imply commercial endorsement by the California Department of Public Health.

Si usted tiene alguna pregunta,
por favor comuníquese con
su clínica o departamento de
salud local.



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Una Guía Para Padres De Familia Sobre Los Piojos De Cabeza



**Pasos fáciles
para el control
de piojos de
cabeza**

¿Qué son los piojos de cabeza?

Los piojos son insectos que viven en el cabello y se alimentan de la sangre humana. Los piojos pegan sus huevos (liendres) en el pelo.

Los piojos mueren rápidamente (dentro de dos días) si no se alimentan de la sangre humana, es por esto que no pueden sobrevivir mucho tiempo lejos de la cabeza de su hijo(a).

A los huevos les toma seis a nueve días para salir del cascarón y siete días o más para desarrollarse en adultos capaces de reproducir.

Desarrollo de un piojo en la cabeza:



¿Cómo se propagan los piojos en los seres humanos?

Los piojos se transmiten entre los niños a través del contacto de cabeza a cabeza con otra persona que tenga piojos y también al compartir gorras, sombreros, ropa de otra persona, cascos, bufandas, audifonos, o al usar el peine, el cepillo de pelo, ropa de cama u otros artículos de uso personal. El problema de los piojos existe en hogares, centros de cuidado infantil, escuelas primarias y guarderías. Los niños son mucho más propensos a ser contagiados por sus familiares y amiguitos que de sus propios compañeros de clases.

¿Cómo puedo saber si mi hijo(a) tiene piojos?

La única forma de saber si su hijo(a) tiene piojos en la cabeza es haciéndole una examinación completa en el cabello. Si su hijo(a) tiene piojos en la cabeza sentirá picazón en el cuero cabelludo.

No confunda la caspa con las liendres.
Las liendres se pegan al cabello.

¿Cómo puedo eliminar los piojos de mi hijo(a)?

Removiendo y peinando las liendres

Si su hijo(a) tiene piojos en la cabeza, la mejor manera de eliminar los piojos es peinar diariamente, completamente y cuidadosamente el pelo, por lo menos 2 semanas. Para este paso es importante usar un peine efectivo para liendres.

Los peines de liendres deben de ser de metal (no plásticos) y que tengan dientes largos. Varias marcas de peines para liendres están disponibles en su farmacia local.

Un buen tipo de peine es el peine de metal de la marca LiceMeister®, el cual cuesta aproximadamente \$10.00. También pueden utilizar peines de metal para pulgas, los cuales se pueden encontrar en cualquier tienda para mascotas.



La mejor manera de quitar la liendres es de partir el pelo en secciones pequeñas. Cuando peine cada sección, asegure el pelo con pasadores o clips para saber que partes han sido ya peinadas. Es mucho más fácil peinar el pelo cuando esta mojado.

Revise por completo el cabello de todo los miembros de su familia. Los lugares más comunes en donde se encuentran los piojos es cerca delcuerpo cabelludo, alrededor del cuello y por detrás de las orejas.



Los huevos que no puedan ser eliminados por un peine, puede quitarlos con sus uñas o cortando el cabello individual entre el ceuro cabelludo y en donde la liendre se une.

Tratamientos



Los productos con ingredientes de Nix® o pyretrina son encontrados muchos de los medicamentos para combatir los piojos que son disponibles, sin receta médica en su farmacia local.

La loción Benzyl Alcohol (5%) tal como Ulesfia® puede ser recetada para matar los piojos en niños de seis meses de edad o mayores.

Sklice®* (0.5% Ivermectin) puede ser recetada para matar los piojos y sus huevos en niños de seis meses edad o mayores.

Tratamientos de Spinosad (0.9%) tal como Natroba® pueden ser recetados para matar los piojos y sus huevos en niños que tienen la edad mínima de cuatro años.

El Lousebuster® es un aparato que ofrece aire caliente a alto flujo al cuero cabelludo para matar los piojos y sus huevos.

MUY IMPORTANTE:

● **Siga las instrucciones de la etiqueta cuidadosamente.**

● **No deje el producto en el cuero cabelludo más del tiempo recomendado. El dejarlo más tiempo no va ayudar a matar los piojos más rápido.**



● **Aplique la medicina solamente en personas que tengan piojos en la cabeza.**

● **Cada persona con piojos en la cabeza, necesita un tratamiento completo. No comparta una caja de champú o de enjuague entre miembros de su familia.**



● **Después del tratamiento, debe quitar las liendres diariamente con un peine para liendres de metal o un peine de pulgas hasta todos huevos se hayan eliminado completamente. Espere 7 a 10 días antes de iniciar un segundo tratamiento, en aquellas personas que aún tengan piojos. Durante este periodo de 7 a 10 días, continúe a eliminar los piojos y los huevos que se encuentren.**

¿Qué pasa si el tratamiento falla?

- A continuación se encuentran las razones por las cuales el tratamiento puede haber fallado:
- Las instrucciones en el producto usado no fueron seguidas detalladamente.
- Los huevos no fueron completamente eliminados.
- Su hijo(a) contrajo piojos otra vez, posiblemente de un amigo(a).
- Las liendres suelen a no morir inmediatamente.
- El problema no eran los piojos.

No existe prueba alguna que los siguientes tratamientos funcionen para matar los piojos:

- Vinagre
- Mayonesa
- Aceite de olivo
- Aceite de té de árbol



A continuación otros pasos adicionales para eliminar los piojos o los huevos en su casa:

Lave toda la ropa y sábanas de cama, en agua extra caliente (130° F) y jabón y seque en un ciclo caliente de por lo menos 20 minutos.



Empaque el artículo que no se lava en una bolsa de plástico y séllela por dos semanas. Esto ayudara a matar las liendres al no alimentarlas.

Lave todos los peines o cepillos de pelo usados por la persona, en agua extra caliente (130° F) y jabón y por lo menos cinco minutos o póngalos a remojar en alcohol o producto Lysol® por una hora. Pase la aspiradora por muebles tapizados y alfombras.



*El uso de este producto no implica el patrocinio del Departamento de Pública Salud de California