

Guidance on Head Lice Prevention and Control for K-12 Schools and Child Care Facilities

This guidance document is provided to assist K-12 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 child care facilities maintain an active educational campaign for parents and caregivers on the accurate identification and proper treatment of head lice to prevent head lice among children. Parents and caregivers play a critical role in the prevention and control of head lice as many schools and child care facilities may not have dedicated staff or adequate resources to routinely evaluate children for head lice.

Historical Policy

Traditionally, policies in schools emphasized that a child infested with head lice could not return to school until nits (eggs or egg casings) were no longer found in the hair. 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 U.S. Centers for Disease Control and Prevention are all opponents of no-nit policies (Frankowski and Weiner 2002; Schoessler 2004). The exclusion of a child from school can adversely affect their emotional, social, and academic well-being and often stigmatizes the child unnecessarily. In addition, transmission of head lice in the classroom setting is low (Mathias and Wallace 1989).

Current Policy

CDPH recommends that children should not be excluded from the classroom based on the finding of head lice or nits.

For the effective control of head lice in schools and child care facilities, CDPH recommends a multipronged approach:

- Distribution of educational materials to parents/caregivers on head lice, nit combing, and treatment.
 - Sample materials include CDPH’s [Head Lice Flyer](#) or [Fact Sheet](#) (available in English and Spanish). Parents/caregivers can also be directed to visit the [CDPH Head Lice webpage](#) for additional information (<https://www.cdph.ca.gov/Programs/CID/DCDC/pages/headlice.aspx>).
- Early detection of head lice infestations through routine screening by parents/caregivers.
- Treatment of children found to have live lice using a combination of lice-killing products and nit combing.

About Head Lice

Head lice, *Pediculus humanus capitis*, exclusively affect humans. Head lice do not jump or fly; they are spread person-to-person primarily through head-to-head contact and will die within 1-2 days away from a person's head. Head lice do not spread disease, but they can be a significant nuisance.

Adult head lice are tan or greyish-white, wingless insects approximately $\frac{1}{8}$ inch in length (similar in size to a sesame seed) that live in people's hair and feed on blood. Adult females glue their eggs (nits) to the base of hairs of the head, close to the scalp. Nits are yellow or white in color and are most often found within $\frac{1}{4}$ inch of the scalp; those farther away from the scalp are usually empty (the lice have already hatched) or are dead.

Lice and nits can be detected by parting the hair and examining near the scalp, most commonly near the ears and the back of the neck. Nits are often easier to find, as lice are small, move quickly, and avoid direct light. Wetting the hair before combing has been shown to be a helpful method in diagnosing an active lice infestation (Jahnke et al. 2009). Children ages 3-11 years old are at highest risk for head lice infestation.

Head Lice in Schools and Child Care Facilities

If lice are seen on a child at school, or if an infestation is suspected, the parents/caregivers of the affected child should be notified at the end of the school day and provided educational materials, such as [CDPH's Head Lice Flyer](#) and [How-To Guide for Nit Combing](#), to instruct parents/caregivers on the proper treatment and control of head lice. The affected child should be admitted to class the following days regardless of treatment or infestation status. If head lice or signs/symptoms of an infestation are still observed, the parent/caregiver should be contacted again.

It is encouraged that staff have a general knowledge of head lice transmission and control, but the role of parents/caregivers in the detection and treatment of head lice is critical.

Communication

Prior to Detection of Head Lice

Proactive education and/or communication with parents/caregivers at the start of the school year or initiation of daycare and after extended breaks may help alleviate situations in which head lice infestations occur.

- When staffing or resources are available, routine distribution of general awareness messaging to parents/caregivers about head lice transmission and how to check for head lice may help alleviate fears and aid in early detection.

Key points that may be helpful to emphasize:

- If a child is found to have head lice, it is important to remain calm. Head lice are not a sign of poor hygiene or living in an unclean environment. Infestations are common among school-aged children – approximately 6 to 12 million infestations occur each year in the United States.
- Children are more likely to acquire head lice during sleepovers, play dates, and family gatherings, where head-to-head contact frequently occurs, than in the classroom.
- Conventional treatment products should not be used to prevent or “ward off” head lice in individuals who do not actively have head lice.

Upon or After Detection of Head Lice

While classroom or facility-wide notification to parents/caregivers is not recommended after head lice have been detected, this policy is at the discretion of the school nurse or administration.

- If a school or child care facility decides to issue a notification about the detection of head lice in a classroom, it is recommended that the notification be general in nature and emphasize continued awareness of head lice by all parties; the express identification of the infested student(s) must be avoided.

Consider following up with parents/caregivers who have been notified about their child’s head lice issue; encouraging parents/caregivers to perform additional checks for head lice after treatment may help determine if treatment was successful and/or if an active head lice infestation has been resolved.

Responsibility of Parents/Caregivers of Children

Parents/caregivers are responsible for checking their children routinely for head lice and following the label instructions for administering treatments if head lice are found. If a parent/caregiver is unable or unwilling to check their child for head lice, a healthcare provider may be able to provide assistance. If a child does have live lice, all members of the affected child’s family or household should be checked for head lice and treated at the same time. However, treatments should be given only to persons with an active head lice infestation. Routine or prophylactic use of head lice treatments is unnecessary and may contribute to resistance of treatment products.

Environmental Control

The primary focus of head lice control in a classroom or child care facility where a child is known to have head lice should be to reduce head-to-head contact if possible (Frankowski and Bocchini 2010). Clothing, stuffed toys, or other classroom items may have nits or lice on them but are unlikely sources of infestation; these items can be cleaned if time or resources allow.

Optional cleaning in a classroom or child care setting:

- Clothing, stuffed toys, and other fabric-type items can be vacuumed or put in a clothes dryer and run using the highest heat cycle. Personal items can be sent home in a sealed plastic bag for cleaning/laundry. Items can also be placed in sealed plastic bags/storage for two weeks to kill hatching lice (nits can take six to nine days to hatch and are unlikely to hatch away from the scalp).
- Combs, brushes, or picks can be soaked in hot water (>130°F) for 5-10 minutes.
- While not necessary, vacuuming the classroom and furniture once a day can decrease the possibility of lice transmission from the environment.

It is also recommended to keep children's clothing and personal items (coats, hats, scarves, and backpacks) separate from the items of other children in the classroom (for example, items can be hung on the back of the child's chair). Additionally, each child's sleeping mat or towel should be individually labeled and stored in separate cubbies or in sealable plastic bags if classroom space allows.

Pesticide application to the school or home environment is not necessary or recommended.

Chronic Cases

If a child is found to be 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 infestation. It is important for schools to identify these children since their continuing infestations may signify other family or socioeconomic problems. A multidisciplinary group consisting of individuals from several agencies, such as representatives of the local health department, social services, and the school (district) nurse, may be able to determine the best approach to identify and resolve the issues that impact the child's chronic head lice infestation. At a minimum, parents/caregivers of a child with a chronic infestation should be referred to a healthcare provider for assistance with treatment options.

Treatment

CDPH recommends the combination of lice-killing products and nit combing for the effective treatment of head lice. It is important that parents/caregivers always follow the label instructions when administering products to treat head lice. Some treatments kill only live lice and a second treatment 7-10 days after the first treatment may be necessary to kill any lice that recently hatched from nits. Reports of resistance to some over-the-counter treatments have been reported 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. Several brands of nit combs (finely-toothed, metal combs) are available at local pharmacies. Other combs may also be adequate if they have long, metal teeth that are very close together. **Sometimes it may seem that the treatment has failed when actually: 1) the substance on the hair shaft was misidentified as nits (i.e., dandruff, styling products, etc.), 2) treatment instructions were not properly followed, or 3) re-infestation with head lice has occurred.**

Consultation with a healthcare provider is recommended if there are questions regarding the various treatment options.

Over-the-counter treatments:

- **Pyrethrins** with piperonyl butoxide shampoo (i.e., A-200®*, Pronto®*, R&C®*, RID®*, Triple X®* for children 2 years of age and older), **and permethrin** (1%) lotion (i.e., Nix®* for children 2 months of age and older) treatments may be used to kill live lice but not nits, and may need to be used again 9-10 days after the initial treatment to kill newly hatched lice. A study of head lice in California indicates that some lice populations are resistant to permethrin and pyrethrins (Gao et al. 2003; Gellatly et al. 2016). If live lice are still observed after a full course of treatment, contact a healthcare provider or pharmacist.
- **Sklice®*** (0.5% ivermectin lotion) is a treatment for children 6 months of age and older. Ivermectin is derived from a soil bacterium and causes paralysis and death in lice. This is a single-use product.

Available by prescription only:

- **Ovide®*** (0.5% malathion lotion) is an effective product to kill lice and may kill some nits. This product can be used only on children 6 years of age and older. **Ovide®* is flammable so parents/caregivers must not use hairdryers when applying this product** (Meinking et al. 2002; Frankowski and Bocchini 2010). Retreatment may be necessary if live lice are seen 7-9 days after the initial treatment.
- **Natroba®*** (0.9% spinosad topical solution) is a treatment for children 6 months of age and older. Spinosad is derived from a soil-dwelling bacterium and works to “over-stimulate” lice and nits into paralysis and death (McCormack 2011). Retreatment may be necessary if live lice are seen 7-9 days after the initial treatment.
- **Stromectol®*** (ivermectin 3-mg tablet) can be given at any age (if weight $\geq$ 33 lbs). This product should be used only if head lice are resistant to all other topical treatments. Treatment with 2 single oral doses, given 7-10 days apart, has shown to be effective in the control of head lice.

Alternative treatments:

- **AirAllé®***, formerly known as 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 at least 30 minutes (Bush 2011). This product can be costly and may require specialized training to use.
 - The use of a common household hairdryer must be avoided as the high temperature required to effectively kill nits and lice can cause serious burns on the skin and scalp. Burns may occur when the hairdryer is held too close or pointed too long on the scalp.
- There may be companies available that offer nit and lice removal services for a fee.

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 “suffocate” nits and lice when applied on the hair or head. 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 (FDA) (Wadowski et al. 2015). The [American Academy of Pediatrics](#) does provide a list of alternative agents for head lice treatment (though not FDA-approved or recommended) for parents/caregivers who may choose to use them (<https://publications.aap.org/pediatrics/article/150/4/e2022059282/189566/Head-Lice>).

For Additional Information

Please contact your local health department for more information. The list of references cited in this document is provided. These guidelines, educational materials, and other CDPH publications can be found on the [CDPH Head Lice webpage](#).

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.

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

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