



# Prescribing Guidelines for Head Lice

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## Prescribing Guidelines for Head Lice

When live head lice are identified on a child, treatment should be quickly initiated. Many treatment options exist with the ideal treatment being safe, readily available, easy to use, effective and inexpensive. This prescribing guideline, developed by Partners For Kids in collaboration with experts at Nationwide Children's Hospital, is designed to help guide you in the pharmacologic treatment of head lice.

## Pediculocidal vs. Ovicidal Agents

- A pediculicide is an agent that kills live lice which includes nymphs and adults.
- An ovicide is an agent that kills lice eggs (nits).
- All topical lice agents have pediculicidal activity, but all do not have complete ovicidal activity.
- Because of the life cycle of a louse, retreatment with most topical lice products is necessary. Retreatment at day 9 is optimal.

## Treatment Considerations:

- Removal of all topical lice treatment medication should be done by rinsing over a sink to help limit skin exposure to the medication that would occur if rinsed in the shower or bath. Warm water should be used, rather than hot, to reduce potential for absorption into the skin.
- After treatment, daily nit removal with a fine-tooth comb is beneficial, as none of the lice treatments are 100% ovicidal. Although tedious, there are commercially available 'nit combs' that can make the process easier for the caregiver.

## Treatment Failure

When lice persist despite treatment, the following should be considered:

- Misdiagnosis
- Lack of adherence
- Inadequate treatment or application
- Reinfestation
- Lack of ovicidal or residual killing properties
- Resistance

## Head Lice Medication List

	Generic Drug Name (Brand Name)	Average Cost Per Script*	Age	Type of Activity	Application	Retreatment†
1st Line	Permethrin 1% (Nix®)	\$7	> 2 months	Pediculocidal	Apply to damp hair that is shampooed with a non-conditioning shampoo and towel dry. Rinse after 10 minutes.	Recommended between day 7 to 10; day 9 is optimal per guidelines.
	Pyrethrins/piperonyl butoxide 0.33%-4% (Rid®)	\$11	> 2 years	Pediculocidal	Apply to dry hair. Rinse after 10 minutes. Avoid in patients with chrysanthemum allergy (low risk for reaction).	Recommended between day 7 to 10; day 9 is optimal per guidelines.
2nd Line	Spinosad suspension 0.9% (Natroba®)	\$256	> 6 months	Ovicidal & Pediculocidal	Apply to dry hair, including scalp, working outward to the ends of the hair. Rinse after 10 minutes.	If live lice seen, may reapply in 7 days per labeling.
	Malathion lotion 0.5% (Ovide®)	\$225	> 6 years; > 2 years for resistance/failure to permethrin/pyrethrins	Ovicidal & Pediculocidal	Apply to dry hair and let air dry. Wash off after 8-12 hours. <b>Highly flammable - no smoking or flames near child.</b>	If live lice seen, may reapply in 7-9 days.
3rd Line	Ivermectin lotion 0.5% (Sklice®)	\$252	> 6 months	Pediculocidal	Apply to dry hair and scalp. Rinse after 10 minutes.	Not required.

\* Average cost per script is based on generic drug when available using an average length of therapy. Prices are for reference and actual cost may vary based on drug strength, quantity and other factors.

† If retreatment is recommended, prescription quantity should be sufficient for both applications.

## References

Devore CD, Schutze GE; Council on School Health and Committee on Infectious Diseases, American Academy of Pediatrics. Head lice. Pediatrics 2015;135:e1355-65.

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## Referrals and Consultations

Online: [NationwideChildrens.org](https://www.NationwideChildrens.org)

Phone: (614) 722-6600 or (877) 722-6220 | Fax: (614) 722-4000

Physician Direct Connect Line for 24-hour urgent physician consultations:  
(614) 355-0221 or (877) 355-0221



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