

# **Lice and Scabies Protocol**

**Federal Bureau of Prisons  
Clinical Practice Guidelines**

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This Lice and Scabies Protocol is made available to the public for informational purposes only. The Federal Bureau of Prisons (BOP) does not warrant these guidelines for any other purpose, and assumes no responsibility for any injury or damage resulting from the reliance thereof. Proper medical practice necessitates that all cases are evaluated on an individual basis and that treatment decisions are patient specific. Consult the BOP Clinical Practice Guideline Web page to determine the date of the most recent update to this document:

<http://www.bop.gov/news/medresources.jsp>.

## What's New in this Document?

**The following changes have been made since the 2008 version of the protocol, and are highlighted in yellow throughout the document:**

- The protocol has been updated to conform to the 2010 CDC Sexually Transmitted Diseases Treatment Guidelines (see [References](#)).

### Treatment of Head and Pubic Lice

- Malathion is considered a suboptimal treatment option for head and pubic lice.
- Ivermectin is a simple, but unproven, treatment option that should be considered on a case-by-case basis.

### Treatment of Scabies

- Information has been added about treating symptoms lasting more than two weeks after the initial treatment.
- Information has been added on the treatment of crusted scabies.

**The 2008 version of this document contained the following changes to the BOP protocol for lice and scabies:**

- Inmate Fact Sheets on Head Lice and Scabies were included (see [Appendix 1](#) and [Appendix 2](#)).

### **Lice**

- Effective screening for lice is facilitated by using a magnifying glass and a bright light.
- Detection of lice can be enhanced by systematically combing hair with a fine-toothed nit comb.
- During a lice infestation, persistent or recurrent pyoderma around the ears and neck often occurs. The cervical and nuchal lymph nodes are often enlarged.
- In the correctional setting, presence of nits is ordinarily an indication for treatment—regardless of whether or not live lice are observed, or how far away they are from the scalp.
- Lindane (Kwell®) is no longer recommended for treatment of lice and is banned in the State of California.

### **Scabies**

- Empiric treatment of close contacts should be considered on a case-by-case basis, particularly with crusted scabies.

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## Purpose

The purpose of this BOP *Lice and Scabies Protocol* is to provide recommended procedures for detection, diagnosis, treatment, and prevention of lice and scabies in the correctional setting.

## Overview

Lice and scabies mites are ectoparasites, organisms that require external contact with the human host for nutriment. Lice are insects. Scabies is caused by mites. Ectoparasites can cause significant outbreaks in congregate settings such as correctional facilities. All inmates should be screened for lice and scabies at intake.

## Lice

### Causative Agents

The three species of lice that commonly affect humans include the following:

- **Head lice** (*Pediculus humanus capitus*), which occur on the hair, and more rarely on the eyebrows and eyelashes.
- **Body lice** (*Pediculus humanus corporis*), which may also inhabit the seams and linings of clothing and bed linens. Epidemics of typhus, trench fever, and louse-borne relapsing fever have been caused by body lice. Although typhus is no longer widespread, epidemics still occur during times of war, civil unrest, and natural disaster, as well as in refugee camps, prisons, and other places where people live crowded together in unsanitary conditions.
- **Pubic (or crab) lice** (*Phthirus pubis*), which infest the pubic area, and more rarely facial hair, axillae, and body surfaces.

Lice are completely dependent upon human blood for survival. They cause a mild dermatitis by sucking blood and exposing the human host to louse saliva and excrement.

### Life Cycle of the Head Louse

The life cycle of the head louse has three stages—nit, nymph, and adult.

- **Nits:** Nits are head lice eggs. They are hard to see and are often mistaken for dandruff or dirt. Nits are laid by the adult female and are cemented at the base of the hair shaft, close to the scalp. Viable eggs are usually located within 6 mm of the scalp. Nits are 0.8 mm by 0.3 mm, oval, and usually yellow to white. They take about one week to hatch (range: 6–9 days).
- **Nymphs:** The egg hatches to release a nymph. The empty nit shell then becomes a more visible dull yellow and remains attached to the hair shaft. The nymph looks like an adult head

louse, but is about the size of a pinhead. Nymphs mature and become adults about 7 days after hatching.

- **Adults:** The adult louse is about the size of a sesame seed, has six legs (each with claws), and is tan to grayish-white. In persons with dark hair, the adult louse will appear darker. Female lice are usually larger than males and can lay up to eight nits per day. Adult lice can live up to 30 days on a person's head. Adult lice need to feed on blood several times daily and will die within 1–2 days when separated from the host.

## Diagnosis

Lice infestations may be diagnosed by means of a careful history, assessment of signs and symptoms, and detection of lice and eggs (nits) through examination of the patient. Screening for lice and nits is enhanced by utilizing a bright light and a magnifying glass.

- **Head lice** infestation often results in severe itching of the scalp; however, some persons are asymptomatic. Infestation is diagnosed by examining the hair and scalp for nits, nymphs, or adults. Finding a nymph or an adult may be difficult. There are usually just a few of them, and they can move quickly. Detection of lice can be enhanced by using a fine-toothed nit comb. The hair should first be brushed or combed to remove tangles. Then, starting near the crown of the head, use the nit comb to systematically comb the entire head twice, examining the comb after each stroke for the presence of lice.

Nits are cemented securely to the hair shaft, and thereby can be distinguished from dandruff and dust. Even if crawling lice are not seen, nits found within a ¼ inch of the scalp strongly suggests that the person is infested. If no nymph or adult lice are seen, and the nits are all located more than ¼ inch from the scalp (i.e., the hair has had time to grow since the nits were laid), the infestation is most likely an old one and less likely to be infectious.

During a lice infestation, persistent or recurrent pyoderma around the ears and neck often occurs. The cervical and nuchal lymph nodes are often enlarged.

- **Body lice** infestations are usually associated with a rash and itching, which constitute an allergic reaction to the lice saliva. Long-term body lice infestations may lead to thickening and discoloration of the skin, particularly around the waist, groin, and upper thighs. Scratching may cause breaks in the skin that can become secondarily infected. Diagnosis is usually based on identifying body lice on the body, or on the infested person's clothing or bedding. Nits can be found in the seams of clothing or on bedding. Occasionally, eggs are attached to body hair.
- **Pubic lice** infestations typically present with itching in the genital area, with visible nits at the base of the pubic hair or crawling lice in the pubic area. **Involvement of the eyelashes can also occur. Patients present with bilateral matted eyelashes and conjunctivitis with visible nits sometimes detected at the eyelash base.**

## Mode of Transmission

- **Head lice** are transmitted by direct contact with infested persons and via objects (fomites) that have been in contact with them (e.g., shared combs, clothing, and bed linens).

- **Body lice** are transmitted by direct and indirect contact with the personal belongings of infested persons, especially shared clothing and head gear.
- **Pubic lice** are transmitted primarily through sexual contact.

## Infectious Period

Lice remain communicable as long as the lice or eggs remain alive on the infested person or on fomites. Lice depart the host with the occurrence of fever in the host. The likelihood of person-to-person transmission is increased with the host (or hosts) having fever, as well as in crowded conditions such as occur in correctional facilities.

## Treatment

The following are general principles related to treatment of lice:

- (1) Because of the congregate setting in prison, the BOP has a low threshold for treatment of lice. Inmates with either observed lice or nits should be treated.
- (2) There are multiple products available to treat lice, and they come in various strengths, indications, and brand names. Carefully read the labels and instructions for use.
- (3) Infection control measures are a crucial and integral part of treatment. The laundry and environmental procedures outlined in "[Infection Control Measures](#)" (page 5) should be performed simultaneously with other treatment measures.
- (4) Provide education to the inmate regarding the treatment regimen, how and where to apply the treatment, length of time to leave it on, how to remove it, and other infection control considerations (see [Appendix 1, Inmate Fact Sheet on Head Lice](#)).
- (5) When either permethrins or pyrethrins are utilized for treatment, patients should be routinely retreated 7–10 days later. Retreatment should kill any newly hatched lice. Even after two applications, treatment failures still occur. More than three applications of the same product within a two-week period is *not* recommended.
- (6) If there is involvement of the eyelids or eyelashes, apply occlusive ophthalmic ointment to the eyelid margins, twice a day for 10 days.
- (7) In addition to medical treatment, it may be helpful to systematically remove lice and nits using a nit comb (particularly if the nits are less than ¼ inch from the scalp). It is recommended that the hair be combed when the hair is wet.
- (8) Most often, treatment failure is due to noncompliance with treatment or to continued exposure to infested, untreated persons. However, treatment failure can result from drug resistance. If reoccurrence of infestation occurs within one month of the previous treatment, re-treat with an alternative agent.

## Treatment of Head and Pubic Lice

Below are two tables that outline the treatment regimens for head and pubic lice. (A note on the use of ivermectin follows the tables.)

### Initial Treatment Regimens for Head and Pubic Lice

Treatment	Permethrin (1%)	Pyrethrins <i>(usually combined with piperonyl butoxide)</i>
<b>Brand Names</b>	Nix®	A-200®, Pronto®, R&C®, Rid®, Triple X®
<b>Description</b>	Permethrin is an insecticide that is considered safe and effective. <i>Permethrins may continue to kill newly hatched lice for several days after treatment. Perform a second treatment in 7–10 days to kill any newly hatched lice.</i>	Pyrethrins are included in a class known as pediculocides or antiparasitic agents. They are natural extracts from the chrysanthemum flower, and are safe and effective. <i>Perform a second treatment in 7–10 days to kill any newly hatched lice.</i>
<b>Dosage Form</b>	Nix® comes in the form of a 1% strength cream rinse. Apply to hair, <i>leave on for 10 minutes</i> , and rinse off. Repeat in 1 week.	Pyrethrins come in multiple dosage forms: foams, creams, gels, liquids, oil, and shampoo. The strength is generally 0.33% pyrethrin and 4% piperonyl butoxide. Apply to hair, <i>leave on for 10 minutes</i> , and rinse off. Repeat in 1 week.
<b>Notes</b>	Permethrin products utilized for <i>scabies</i> come in a higher (5%) concentration. Permethrin has a high alcohol content, posing a flammability risk and potential for diversion.	

### Alternative Treatment Regimen for Head Lice

Treatment	Malathion 0.5% solution (Ovide®)
<b>Description</b>	When used as directed, malathion effectively treats lice. Some medication remains on the hair and can kill newly hatched lice for 7 days after treatment. Few side-effects have been reported. Malathion can sting if applied to open sores, which may have occurred from scratching.
<b>Dosage Form</b>	<i>Malathion is left on for 8–12 hours</i> , and rinsed or shampooed off with non-medicated shampoo. Repeat in 7–9 days.
<b>Notes</b>	Malathion has a high alcohol content, posing a flammability risk and potential for diversion. Furthermore, Malathion’s strong odor and requirement for a long duration of topical application make it a suboptimal treatment option.

**Note:** Ivermectin at 200 micrograms per kilogram—delivered orally and then repeated once 2 weeks later—is a simple treatment option that should be considered on a case-by-case basis for inmates who have failed therapy with a topical agent.

## **Treatment Regimen for Body Lice**

To treat infestations of body lice, the infested person should shower and change into clean clothes. All infested clothing, bed linens, and towels should be laundered. When laundering items, use hot water (at least 130°F) and dry items in a dryer set to the hot cycle. For persons with extensive body hair, a 1% permethrin lotion or a pyrethrin shampoo may be applied to the entire body. For persons with localized body hair, these pediculicides may be applied to hairy regions.

## **Infection Control Measures**

- Inmates with suspected or diagnosed lice infestation should be housed in a single-cell room, and restricted from all work assignments and visitations, until 24 hours after their initial treatment has been completed.
- Inmates with lice infestations should ordinarily not be transferred to other BOP institutions until 24 hours after treatment.
- Utilize contact precautions, in addition to standard precautions, until 24 hours after the initial treatment is completed. Contact precautions should be used for any hand or skin-to-skin contact that is necessary for inmate care, including direct contact with the inmate, as well as contact with the inmate's personal items. Use appropriate barrier protection (i.e., gloves and gown).

### **At the same time that the lice-infested inmate is being treated:**

- All clothing, sheets, towels, and other washable items used by the inmate in the previous 2 days should be washed in hot water (at least 130°F) and dried on the hot cycle. Alternatively, the laundry can be bagged, sealed, and left undisturbed for 2 weeks—and then processed as regular (uninfested) laundry.
- Personal items of infected inmates, such as radios and toiletries, and their mattresses and furniture should be wiped down with a routine environmental cleaning agent. Fumigation of cells or dormitories is not indicated.
- Wash combs and brushes with soap, and rinse in hot (130°F) water for 5–10 minutes.

## **Management of Contacts**

- A contact investigation should be conducted to identify possible contacts. Because head lice can be transmitted by casual contact, a wider investigation should be conducted for head lice than for body or pubic lice infestations.
- Contacts should be systematically and thoroughly examined for evidence of lice or nits (ideally utilizing a bright light and a magnifying glass).
- Prior to transfer, any inmate who has been in contact with lice should be screened for lice and medically cleared for transfer.
- Empiric treatment of asymptomatic cellmates is recommended.
- Inmate contacts who are diagnosed with a lice infestation should be isolated from other inmates. A secondary contact investigation should be conducted.
- All staff contacts should be referred for medical evaluation and treatment in accordance with BOP policy.



## Scabies

### Causative Agent

Scabies is a parasitic infection of the skin. It is caused by the mite, *Sarcoptes scabiei*, a light brown, eight-legged mite that is shaped like a turtle. Mites are difficult to see with the naked eye. Female scabies mites burrow under the skin creating a tunnel that is advanced by about 2 mm daily. Over a period of one to two months, a mite lays approximately 10–25 eggs. On average, a typical patient harbors only 12 mites at a time. Sensitization to mite eggs and excreta takes several weeks, and results in intense itching and excoriation of the skin from scratching. Crusted scabies, also known as Norwegian scabies, is an aggressive infestation of *S. scabiei* that usually occurs in immunodeficient, debilitated, or malnourished persons.

### Presentation

**Typical infestation:** The predominant symptom of scabies is pruritus. Sensitization to *S. scabiei* occurs before pruritus begins. The first time a person is infested with scabies, sensitization takes up to several weeks to develop. However, pruritus might occur within 24 hours of a subsequent reinfestation. Lesions are prominent around finger webs and on the anterior surfaces of wrists and elbows. In men, lesions are frequently around the belt line, thigh, and external genitalia. In women, they are often located on the nipples, abdomen, and lower portion of the buttocks. Itching is intense, especially at night. Lesions can become secondarily infected from scratching and can present as pustules due to secondary staphylococcal infections. Also, generalized urticaria (hives) can occur with scabies.

**Crusted scabies:** In healthy patients, the number of mites present at a given time is controlled via cellular immunity. Persons lacking cellular immunity (i.e., due to HIV infection, lymphoma, leprosy, etc.) are prone to developing crusted scabies. Crusted scabies starts with ill-defined erythematous patches that evolve into scabs, particularly affecting the hands, feet, and scalp. If untreated, the lesions ultimately cover the entire body. The lesions crust and may become malodorous. The crusts and scales contain hundreds of thousands of mites. Frequently the nails are dystrophic, discolored, and thickened. There may be little or no itching.

### Diagnosis

A scabies diagnosis is often based upon a patient history of severe itching and by characteristic distribution of lesions. Microscopic confirmation of diagnosis is often not necessary. Itching may not present until several weeks after infection and often intensifies after bathing and is worse at night. Accurate identification of a linear burrow (2 to 15 mm long) is pathognomonic for scabies. Scabies can be presumptively diagnosed through the burrow ink test. Ink is applied over a suspected burrow site and allowed to dry. The surface ink is removed by wiping with alcohol. Residual ink, particularly tracking in a burrow, is highly suggestive of a scabies infestation. The definitive diagnostic test for scabies is microscopic examination of skin scrapings for evidence of mites and eggs. However, mites can be difficult to detect since they are often scarce in number. Care should be taken to choose lesions for scraping that have not been excoriated by repeated scratching. Applying mineral oil to the lesion prior to scraping facilitates collection and examination of the scrapings under a cover slip. Skin biopsy may be helpful with atypical cases.

## Mode of Transmission

Transmission of scabies mites occurs via prolonged direct contact with infested skin. Scabies is frequently sexually acquired. Except in the case of crusted scabies, transmission from undergarments and bed clothes can occur only if they have been contaminated by an infested person *immediately* beforehand. In contrast, persons with crusted scabies syndrome are highly contagious. Because of the large number of mites present with crusted scabies, there is a much greater likelihood of transmission from fomites (e.g., contaminated clothing and bedding).

## Infectious Period

Scabies remains communicable via close person-to-person contact until mites and eggs are destroyed by treatment, ordinarily after one, and occasionally two, courses of treatment. In the absence of treatment, individuals can remain infectious for prolonged periods. Scabies mites can live only for a short time outside the body.

## Treatment

Infection control measures are an essential component of treatment. The procedures for laundry and disinfection outlined in [“Infection Control Measures”](#) (page 9) should be performed *simultaneously* with other treatment measures. Inmates with scabies should have their fingernails closely trimmed. Aggressive treatment with antipruritic medication is warranted to minimize excoriation from scratching. Itching may *worsen* immediately after treatment and remain a problem for 1–2 weeks.

## General Instructions for Scabies Treatment

After bathing, topical medication should be applied from the neck down to the toes, emphasizing crevices between skin-folds, fingers, toes, buttocks, and armpits, and under breasts. After leaving the medication on the body for the recommended period of time, the inmate should be allowed to shower off the cream or lotion and put on clean clothes. Educate the inmate about self-administering the treatment according to the manufacturer’s package insert, including: how and where to apply it, length of time to leave it on, precautions to take, and how to remove it (see [Appendix 2, Inmate Fact Sheet on Scabies](#)). Inmates treated for scabies should be advised that the rash and itching may persist for two weeks after treatment. Symptoms or signs of scabies that persist beyond two weeks can be attributed to several factors: misapplication of scabicide; reinfection from other inmates, which may be evidenced by new burrows; exposure to infested fomites, clothing, or bedding linens; or a host allergic dermatitis. Inmates who are symptomatic after two weeks of their initial treatment for scabies should be considered for retreatment. An alternative treatment option should be considered.

## Crusted Scabies

The optimal treatment regimen for crusted scabies is unclear. The CDC recommends combined treatment with a topical scabicide and repeated treatment with oral ivermectin 200 micrograms per kilogram on days 1, 2, 8, 9, and 15 for severe cases. Ivermectin should be combined with the application of 5% topical permethrin (full body application repeated daily for 7 days, then 2 times weekly until cured). Fingernails should be closely trimmed to reduce injury from excessive scratching. (*Note:* Lindane is contraindicated as the topical adjunct for the treatment of scabies.)

## Treatment Regimens for Scabies

### Initial Treatment Regimen for Scabies

Treatment	Permethrin cream (5%)
<b>Brand Names</b>	Elimite® and Acticin®
<b>Dosage Form</b>	Cream should be applied to all areas of the body, from the neck down, and <i>washed off after 8–14 hours</i> . It is generally recommended that pregnant women be treated with permethrin.
<b>Notes</b>	Permethrin products utilized for <i>lice</i> come in a lower (1%) concentration. Permethrin has a high alcohol content, posing a flammability risk and potential for diversion.

### Alternative Treatment Regimens for Scabies

Treatment	Ivermectin (orally; repeated in 2 weeks)	Lindane 1% (gamma benzene hexachloride) (1 oz of lotion applied topically)
<b>Brand Names</b>	Stromectol® (available in 3 mg tablets)	Kwell®; Gamacid®
<b>Warnings</b>	<p>Ivermectin is an antihelmintic agent that has been used extensively and safely in the treatment of other parasitic infections, but the U.S. Food and Drug Administration has not approved the drug for the treatment of scabies infection.</p> <p><i>Ivermectin as a treatment for scabies is only to be utilized in consultation with the Central Office.</i></p> <p>Ivermectin must be administered via pill line.</p>	<p>When used as directed, lindane is probably safe. With overuse, misuse, or accidental swallowing, lindane can be toxic to the brain and other parts of the nervous system.</p> <p><b>A Black Box warning</b> indicates that <i>lindane lotion should only be used in patients who cannot tolerate or have failed first-line treatment with safer medications for the treatment of scabies. Do not use in patients with seizure disorders, open wounds, crusted (“Norwegian”) scabies, or chronic active liver disease, or in pregnant females. It should be used with caution in persons who weigh less than 100 pounds. An FDA Medication Guide is required when it is dispensed:</i></p> <p><a href="http://www.fda.gov/cder/Offices/ODS/labeling.htm">http://www.fda.gov/cder/Offices/ODS/labeling.htm</a>.</p> <p>Lindane use is banned in the state of California.</p>
<b>Description</b>	Oral ivermectin is an effective alternative to topical agents for scabies treatment. It may be particularly useful in patients who are immunocompromised or after failure of topical therapy. Oral dosing may be more convenient in institutional outbreaks and with mentally impaired patients.	Instruct patients on the proper use of lindane lotion (including that they are <i>not</i> to drink it), the amount to apply, how long to leave it on, and avoiding re-treatment. Inform patients that itching occurs after the successful killing of scabies and is not necessarily an indication that they be re-treated with lindane lotion.
<b>Dosage Form</b>	<p>The ivermectin dose is based upon weight (200 micrograms per kg):</p> <p>≤50 kg = 3 tabs (9 mg) 51–65 kg = 4 tabs (12 mg) 66–79 kg = 5 tabs (15 mg) 80+ kg = 6 tabs (18 mg)</p>	Lotion is applied in a thin layer to all areas of the body from the neck down, and thoroughly washed off after 8 hours. Do not leave on longer than directed.

## Infection Control Measures

- Inmates with suspected or diagnosed scabies should be housed in a single-cell room, and should be restricted from all work assignments and visitations for 24 hours after treatment.
- During the first 24 hours after treatment, contact precautions (in addition to the standard precautions) are necessary for any hand or skin-to-skin contact that occurs during inmate care involving direct contact with the inmate or the inmate's personal items. Appropriate barrier protection (i.e., gloves and gown) should be used.
- *At the time that the inmate is treated for scabies*, all clothing, linen, towels, and other personal items must be washed in hot water (at least 130°F) and dried on the hot cycle. Alternatively, clothes and linens can be bagged and sealed for 72 hours.
- Fumigation of living areas is unnecessary.

## Management of Contacts

- Interview the case to identify anyone who has had skin-to-skin contact. A wider contact investigation should be conducted for inmates with Norwegian scabies because of the higher likelihood of transmission, both person-to-person and from environmental surfaces.
- Empiric treatment for close contacts should be considered on a case-by-case basis (particularly with crusted scabies), giving consideration to the number of epidemiologically related cases of scabies that have occurred. *Widespread prophylaxis may be indicated in the event of crusted scabies.*
- The treatment of cases and contacts must be carefully coordinated so that *all are treated in the same 24-hour time period.*
- Inmate contacts who are diagnosed with scabies should be isolated from other inmates. A secondary contact investigation should be conducted.
- All staff contacts should be referred for medical evaluation and treatment in accordance with BOP policy.

## Reporting

Two or more epidemiologically-linked cases of lice or scabies, or *any* case of crusted scabies, should be reported to the Central Office via BOP form BP-S664, Infectious Disease Outbreak Record.

## References

Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines, 2010. *MMWR*. 2010;59(RR-12):1–109. Available from: <http://www.cdc.gov/STD/treatment/2010>

Centers for Disease Control and Prevention Fact Sheets:

Lice: <http://www.cdc.gov/lice/>

Scabies: [www.cdc.gov/ncidod/dpd/parasites/scabies/factsheet\\_scabies.htm](http://www.cdc.gov/ncidod/dpd/parasites/scabies/factsheet_scabies.htm)

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## **Appendix 1. Inmate Fact Sheet on Head Lice**

### **What are head lice?**

Head lice are insects that can be found on the head, eyebrows, and eyelashes. They live close to the scalp and feed on human blood several times a day.

### **How are head lice spread?**

Head lice are spread by through close contact with a person who has head lice. Head lice can also be spread through objects that have been in contact with a person who has lice, such as hats or pillows.

Tell your health care provider about any fellow inmate who has been in close contact with you. They may also need lice treatment.

### **What do head lice look like?**

*Adult head lice* are the size of a sesame seed. They have six legs and are tan to grayish-white in color.

*Nits* are lice eggs that are cemented to the bottom of the hair shaft, close to the scalp. They are difficult to see and are often confused with dandruff or dust.

### **How is my head lice treated?**

1. Carefully place your bed linens, pillows, blankets, and towels, and any unwashed clothes, into large plastic bags so they can be decontaminated.
2. Take a shower and wash your hair. After washing your hair, use your fingers to work the lice medicine into your scalp and throughout your hair. Keep the lice medicine in your hair for the total amount of time recommended by your health care provider. Then, follow instructions for rinsing off the lice medicine
3. Dry your hair with a clean towel. Place that towel into one of the same plastic bags.
4. Put on clean clothes and use clean sheets.
5. You should have another lice shampoo treatment about one week after the first treatment.

*Note: It may be recommended that your hair be combed with a special lice comb to remove the lice.*

### **What should be done so I don't get infested again? How should my clothes, sheets, and blankets be handled?**

Your sheets, blankets, and worn clothes should be machine washed in hot water (130°F) for at least 10 minutes and then dried on the hot cycle. If this is not possible, these items should be placed in a sealed, plastic bag for at least 14 days. The mattress and pillows should be completely cleaned with a routine disinfectant.

### **How long do I need to be housed separately?**

You must stay in your room and not have contact with others until 24 hours after you have completed your head lice treatment. During that time you cannot leave your room, not even to work.

### **When should I see my health care provider for follow-up?**

You must be re-examined by your provider one week after your treatment is completed, to see if re-treatment is necessary. If your head begins to itch again after you have completed your treatment, you should tell your health care provider as soon as possible. You may need another lice treatment.

## **Appendix 2. Inmate Fact Sheet on Scabies**

### **What is scabies?**

Scabies is an infestation of the skin with a tiny mite (insect) that is not visible to the naked eye. The mite creates a tunnel or burrow under the skin and causes intense itching. Often it can be found on or near the webs of the fingers, the inside of the wrist, the nipples (especially women), the waist, and the male sexual organs.

### **How is scabies spread?**

Scabies is spread with close skin-to-skin contact, frequently through sexual contact. Tell your health care provider about any inmate who has been in close contact with you. They may also need scabies treatment.

### **How is scabies treated?**

1. Carefully place your bed linens, blankets, and towels, and any unwashed clothes, into large plastic bags so they can be properly decontaminated. Remove any rings, bracelets, or watches. Clip your fingernails and toenails.
2. Take a lukewarm (not hot) bath or shower, and dry off well with a clean towel. Place that towel into one of the same plastic bags.
3. Apply the scabicide medication in a thin, even layer over your entire body from your neckline down, including your feet and behind the ears. Avoid getting the medication into your eyes, nose, or mouth.
4. Pay special attention to getting cream on your hands (between the fingers and, by using a nail brush, under the nails), between all skin folds, on the navel, on the chest, under the breasts, on the entire genital area, between the buttocks, and all over the feet (including the soles and in between the toes).
5. Put on clean clothes and use clean sheets.
6. Leave the cream on for 8–14 hours (i.e., overnight), as recommended by your health care provider.
7. If any cream comes off during this time (for example, while using the bathroom or placing your feet on the floor), reapply the cream. Keep the lotion on for entire the amount of time recommended by your provider. After that, take a shower and *completely* wash off the cream.

*Note: After the treatment, you may initially experience increased itching and continue to itch for 2-3 weeks. However, this does not usually mean that you are still infested.*

### **How long do I need to be housed separately?**

You must stay in your room and not have contact with others until 24 hours after you have completed treatment (all the steps above). During that time you cannot leave your room, not even to work.

### **What should be done so I don't get infested again? How should my clothes, bed linens, and blankets be handled?**

If possible, your sheets, blankets, and worn clothes should be machine washed in hot water (130°F) for at least 10 minutes and then dried on the hot cycle. If this is not possible, these items should be placed in a seal-tight bag for at least 72 hours. The mattress, pillows, bedside equipment, and floors should be completely cleaned with routine disinfectant. Throw away any lotions, creams, or ointments.

### **When should I see my health care provider for follow-up?**

You must be re-examined by your provider one week after treatment. If any new rashes or skin burrows appear after you have completed your treatment, report this to the health clinic staff as soon as possible.