PEDICULOSIS (Outbreaks only)

1. **Agent:** Pediculus humanus capitis, the head louse; Phthirus pubis, the crab louse; Pediculus humanus corporis, the body louse.

2. **Identification:**
   a. **Symptoms:** Itchiness (or may be asymptomatic) or infestation of the scalp or the hairy parts of the body (including eyebrows) with adult lice, larvae, or nits (eggs). Patients with pubic lice may have bluish-colored macules on chest, abdomen, or thighs (maculae ceruleae).
   b. **Differential Diagnosis:** Scabies, eczema, impetigo, and insect bites.
   c. **Diagnosis:** Visualization of nits or lice microscopically or clinically.

3. **Incubation:** From egg to first nymph is 6-9 days. It takes 2-3 weeks from hatching of eggs to mature lice capable of reproduction.

4. **Reservoir:** Human.

5. **Source:** Infested person.

6. **Transmission:** Direct contact with hair of infested person; less commonly, indirect contact with their personal belongings, especially head coverings, clothing, combs, brushes, helmets, and head phones.

7. **Communicability:** While viable lice and eggs remain on infested person and clothing. (Head lice survive only 1-2 days away from the scalp.)

8. **Specific Treatment:** Permethrin (Nix® Creme rinse), or pyrethrin (RID®, A-200®, R&C®, generic) pediculicidal shampoo can be used to treat both head and pubic lice. Retreatment may be necessary for pubic lice. Benzyl Alcohol Lotion 5% (Ulesfia® Lotion) applied to the scalp or scalp hair is a new prescription medication for treatment of head lice in children over 6 months of age and adults. Treatment with malathion (Ovide®) may be considered when treatment failures occur with permethrin and pyrethrin based products. Lindane (Kwell®) can no longer be obtained in California.

   The most effective control measure for head lice is to comb through hair every day with a metal nit comb until all lice and nits are removed.

   Body lice need no specific treatment except improving hygiene and cleaning clothes.

9. **Immunity:** None.

**REPORTING PROCEDURES**

1. **Outbreaks reportable.** California Code of Regulations, Section 2502.

2. **Report Form:** OUTBREAK/UNUSUAL DISEASE REPORT (CDPH 8554) (outbreaks only).

3. **Epidemiologic Data:**
   a. Site of infestation.
   b. Contact with infested persons or fomites.
   c. School or other group contacts should be identified (e.g., day-care centers).

**CONTROL OF CASE, CONTACTS & CARRIERS**

**CASE:**

1. Delouse person, clothing, and other personal articles (possible fomites).

2. For head or body lice, exclude from sensitive situations, school and all public gatherings until patient is adequately treated and infested clothing has been decontaminated.

**CONTACTS:** Household members may need to be treated prophylactically if they share bedding, toilet articles, clothing, etc.
PREVENTION-EDUCATION

1. Discuss the recognition of infestation, especially with school nurses or aides.

2. Instruct infested individuals or family to delouse head or body according to medical or label instructions.

3. Report skin irritations from sensitization or over-treatment to physician.

4. Launder bed linens, towels, and clothing at proper temperature (130°F) then dry on hot cycle for at least 20 minutes; or dry clean or place items in tightly closed plastic bag for 2 weeks. Disinfect toilet articles (combs, brushes, hair bands and barrettes, etc.) by boiling for 5 minutes or by soaking them in rubbing alcohol or Lysol® disinfectant for 1 minute. Vacuum rugs and upholstered furniture. Insecticide sprays are not recommended.

5. Reapplication of pediculicide in 7-10 days may be necessary to kill any nits that have hatched. Use of nit comb is recommended to remove dead nits from hair.

6. Advise parents to check child's scalp for lice and/or nits for 2 weeks following treatment.

    California Department of Public Health school recommendations are: early detection of head lice infestations through routine screening, distribution of educational materials regarding head lice to school staff and parents, nit combing and treatment, treatment of children with lice infestation, and a no-lice policy. For more information see Guidelines on Head Lice Prevention and Control for School Districts and Child Care Facilities, 2009.

7. There is no convincing scientific evidence to support the use of products such as vinegar or other agents to dissolve the glue on nits or kill them. Also, there is no scientific data to support the claim that mayonnaise, oils, or any other product on the hair will suffocate nits and lice.

DIAGNOSTIC PROCEDURES

None other than clinical observation.