



RINGWORM OF SCALP (Outbreaks only)

(*Tinea capitis*)

1. **Agent:** Various species of *Trichophyton* and *Microsporum*; e.g., *Trichophyton tonsurans*, *Microsporum audouinii*, *M. canis*. *Trichophyton tonsurans* is responsible for 90% of the cases in the USA.
2. **Identification:**
 - a. **Symptoms:** May begin as small papules that spread peripherally, leaving scaly patches of baldness; or as numerous discrete pustules; or as discrete areas of hair loss studded by stubs of broken hairs. Occasionally boggy, raised and suppurative lesions (kerions) develop. Favus (infection by *T. schoenleinii*) is characterized by mousy odor and yellowish, cup-like crusts.
 - b. **Differential Diagnosis:** Other dermatoses.
 - c. **Diagnosis:** Typically a clinical diagnosis. Microscopic examination of hairs and skin scales in 10% potassium hydroxide, Wood's (ultraviolet) light, or culture. Lesions caused by *M. canis* and *M. audouinii* fluoresce yellow-green under Wood's light. *Trichophyton* species do not fluoresce. Culture is necessary for organism identification.
3. **Incubation:** Unknown, thought to be 1-3 weeks. Usually 10-14 days.
4. **Reservoir:** Humans (principally) for *T. tonsurans*, *M. audouinii*, and *T. schoenleinii*; animals, primarily dogs, cats, and cattle, harbor other species.
5. **Source:** infected hair and skin scales.
6. **Transmission:** Direct skin-to-skin or indirect contact from fomites.
7. **Communicability:** While active skin lesions or viable spores on contaminated fomites are present. Viable spores may live on fomites for months.

8. **Specific Treatment:** Griseofulvin (Grifulvin V, Gris-PEG), Itraconazole (Onmel, Sporanox), Fluconazole (Diflucan), Terbinafine. Selenium sulfide shampoos (1% or 2.5%) decrease fungal shedding and may help reduce transmission. In resistant cases with kerion formation (severe inflammatory response from ringworm), the combination of oral prednisone and griseofulvin may be helpful.
9. **Immunity:** Reinfections are rare.

REPORTING PROCEDURES

1. **Outbreaks:** all outbreaks of ringworm of the scalp in the community are reportable per Title 17, California Code of Regulations, Section 2500. **ACDC will investigate routine clusters and outbreaks. If there is a high level of concern or noncompliance, outbreaks may be referred to Community Field Services at the discretion of and in collaboration with ACDC and the Regional Medical Director.**
- 2.
3. **Report Form:** [OUTBREAK/UNUSUAL DISEASE REPORT FORM \(CDPH 8554\)](#)
4. **Epidemiologic Data:**
 - a. Site of infection.
 - b. Exposure to known infected humans or animals, such as a dog, cat, or farm animal.
 - c. Shared hair-care items or fomite, e.g., hair clippers, combs, brushes, hats, pillowcases, etc.

CONTROL OF CASE & CONTACTS

Investigate outbreaks only. Initiate evaluation within 24 hours.

CASE: Clinically diagnosis by provider or diagnostic test.

Isolation: None.



CONTACTS:

No restrictions.

Encourage examination of household, other close contacts, and pets for evidence of infection. Treat if infected.

PREVENTION-EDUCATION

1. Stress personal cleanliness; encourage individual combs, brushes and other personal items. Include proper sterilization of barbering equipment.
2. Advise households with pets that transmission can occur between animals and humans.

3. Advise child-care providers that children's cots and mats should be arranged such that the children are placed head to toe.

DIAGNOSTIC PROCEDURES

Container: Mycology.

Laboratory Form: Test Requisition and Report Form H-3021

Examination Requested: Dermatophyte.

Material: Hair and/or scalp scrapings.

Amount: Several hairs from involved area.

Storage: Room temperature.

Remarks: Place material into provided 50 ml plastic tube.