

Ringworm Screening in the Shelter

Ringworm is one of the most devastating diseases that can enter an animal shelter, particularly for the feline population. A systematic and thorough screening process can prevent an outbreak and help keep the population happy and healthy!

1. Evaluate the history.

Does the animal come from the same home as known infected animals? Are the littermates or cagemates infected with ringworm?

2. Perform a physical examination.

Thoroughly examine the skin under a bright light for any areas of hair loss, redness, broken hairs, excessive shedding, flakes and crusts. Pay close attention to the muzzle, lips, around the eyes, ears, toes and tail.

3. Examine the fur with a Wood's lamp.

Look for hairs to glow bright green at the follicle, at the base of the hair and along the shaft – not at the tip!

4. Perform microscopic examination of fluorescing hairs.

Glowing hairs can be plucked and examined under a microscope using 4X magnification. Infected hairs are wide and irregular. Occasionally fungal spores and hyphae can be seen.

5. Perform fungal cultures.

Culture is the most accurate method of diagnosis and it allows you to determine the type of fungus causing the infection. Quantifying the severity of fungal growth on a culture can help direct management and treatment of the population.

Using a Wood's Lamp

- A Wood's lamp is a special ultraviolet light with a 365nm wavelength. It is NOT the same thing as a black light!
- Wood's lamps that plug in (rather than operate on batteries) are generally more effective.
- The lamp must be turned on and allowed to warm up for 5 minutes prior to examination.
- The exam should be conducted in dark room for 3-5 minutes – it can take several minutes for glowing hairs to become visible.

Performing a Toothbrush Culture

- Using a new toothbrush, vigorously brush the animal's entire body for 3-5 minutes.
- Brush any areas with skin lesions last, so as not to contaminate the rest of the coat.
- Starting in the center and working outward, gently push the toothbrush bristles into a fungal culture plate. Cover the entire surface of the culture plate.
- Label the bottom of the plate with the animal's ID number and the date.

Always wear gloves and discard the toothbrush after use!

Recommended resource: Moriello KA, Newbury S. Ch. 16. Dermatophytosis. In Miller L and Hurley K, Eds. [Infectious Disease Management in Animal Shelters](#). Wiley-Blackwell, 2009. p. 243-273.

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