

PINWORM INFORMATION AND CELLULOSE COLLECTION TECHNIQUE

Pinworms are found throughout the world and they cause the most common worm infection in the United States. Infections are passed from one person to another particularly in crowded areas, such as day care centers and schools. The adult worms live at the end of the intestine and migrate at night to the anus to lay their eggs - as many as 20,000 eggs at one time. The infectious eggs can contaminate clothing, bedding, dust in the room, as well as toys and furniture. The eggs which can survive for long periods, can be inhaled and swallowed, move down to the intestine where they hatch, and within 4-6 weeks, mature into egg-laying adults. Thorough cleaning of household items and clothing, etc. is recommended to prevent further spread. Most infected children and adults show no signs of infection and just serve as a source for new eggs. However, some persons may develop symptoms, particularly persistent rectal itching and sleeplessness. Other unpleasant symptoms include abdominal pain, diarrhea, vaginal itching, and irritability. Diagnosis is made performing the "Tape Test." Pinworm eggs will stick to the tape and can then be seen by examining the tape under a microscope.

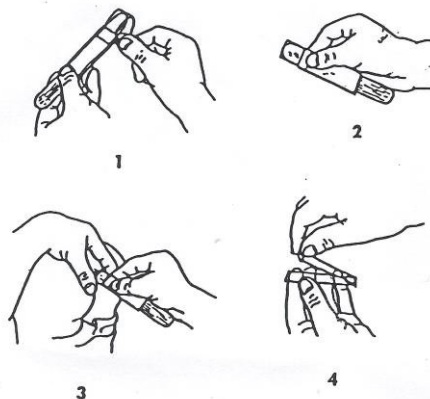
COLLECTION OF SPECIMEN:

Use clear, non-frosted cellulose tape only. Do *not* use Magic transparent tape. Test request will be canceled if specimen is on frosted tape. Obtain "Pinworm Collection Kit" from Customer Service (314-362-1470).

- STEP 1: Obtain specimen in the early morning before rising out of bed and prior to bathing and defecation.
- STEP 2: **Send specimens to the lab contained in a plastic slide transport container. Label the frosted end of the slide with the patient's first and last name, date of birth, and date collected. A patient label with at least two identifiers is then applied to the outside of the plastic transport container.**
Slides that are not labeled as instructed will be canceled as a "misabeled specimen".
- STEP 3: To obtain a sample from the perianal area, use one of the slides with tape attached. Peel back the tape by gripping the tape handle; and with the tape looped (adhesive side outward) over a wooden tongue depressor held against the slide and extended about 1 inch beyond it, press the tape firmly several times against the right and left perianal folds.
- STEP 4: Smooth the tape on the glass slide, adhesive side down.
- STEP 5: Submit the slides, with adherent tape attached, to the physician's office or laboratory in the Ziploc plastic bag provided.

- NOTE:**
- 1. **A minimum of four to six consecutive negative tapes is required to rule out infection.**
 - 2. **To prevent spread of pinworm it is extremely important to wash hands immediately after obtaining the sample.**

Figure 29.1 Collection of Enterobius Vermicularis eggs by the cellulose tape Method. (Illustration by Nobuko Kitamura.)



Reference:

Garcia, L. S. Diagnostic Medical Parasitology, 6th Ed., pp 98-100, 2016. ASM Press, Washington, D.C.