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**Lab Dept:** Microbiology/Virology

**Test Name:** OVA AND PARASITE EXAM, ASPIRATED SPECIMEN

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**General Information**

**Lab Order Codes:** OAP

**Synonyms:** Duodenal aspirate for Ova and Parasites; O & P Exam, duodenal aspirate; O & P Exam, sputum; O & P Exam, urine; Schistosoma Exam, urine

**CPT Codes:** 87177 – Ova and parasites, direct smears, concentration and identification  
88312 – Special stains; Group I for microorganisms, each

**Test Includes:** Examination of aspirate for intestinal parasites by direct/concentrated microscopic exam and trichrome stain. If only *Cryptosporidium* or *Giardia lamblia* are requested. Refer to specific listing for [Cryptosporidium/Giardia FA](#).

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**Logistics**

**Lab Testing Sections:** Microbiology

**Phone Numbers:** MIN Lab: 612-813-5866  
STP Lab: 651-220-6555

**Test Availability:** Daily, test performed 0700 – 1500

**Turnaround Time:** 1 - 2 days

**Special Instructions:**

- **Specimen site** and **date/time of collection** are required for specimen processing.
- Indicate travel history, clinical diagnosis or parasite suspected on requisition.

**Warning:** Aspirated specimens collected from a patient infected with parasites are highly infectious. Use extreme caution when *Entamoeba histolytica*, *Hymenolepsis nana*, and *Taenia* sp. are suspected.

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**Specimen**

**Specimen Type:** Aspirate of cyst or abscess, duodenal aspirate, mid-day urine, sigmoid aspirate, or sputum

<b>Container:</b>	Sterile, leakproof container
<b>Volume:</b>	3 - 4 mL aspirate, 1-3 mL sputum or entire mid-day urine collection with last voided portion containing blood and mucus.
<b>Collection:</b>	<p><b>Duodenal Aspirate:</b></p> <p><b>Onsite collections ONLY:</b></p> <ol style="list-style-type: none"> <li>1. Specimen is obtained by use of a gastroduodenal tube or a fiberoptic endoscopy study, either by direct aspiration or into a trap.</li> <li>2. Place aspirate into a sterile leakproof container.</li> <li>3. Transport directly to the laboratory (<math>\leq 15</math> minutes) since specimens must be examined within 1 hour of collection.</li> </ol> <p><b>Sigmoidoscopy:</b></p> <p><b>Onsite collections ONLY:</b></p> <ol style="list-style-type: none"> <li>1. Perform flexible or rigid sigmoidoscopy.</li> <li>2. Aspirate liquid from the inflamed bowel with a pipette passed through the sigmoidoscope.</li> <li>3. Place aspirate into a leakproof container.</li> <li>4. Transport directly to the laboratory (<math>\leq 15</math> min) since specimens must be examined within 1 hour of collection.</li> </ol> <p><b>Sputum (Expectorate):</b></p> <p><b>Onsite collections ONLY:</b></p> <ol style="list-style-type: none"> <li>1. Collect early morning specimen under the direct supervision of a nurse or a physician.</li> <li>2. Have patient rinse or gargle with water to remove superficial flora.</li> <li>3. Instruct patient to cough deeply to produce a lower respiratory specimen.</li> <li>4. Exam specimen to make sure it contains thick mucus. Do not submit saliva.</li> <li>5. Transport directly to the laboratory (<math>\leq 15</math> min) since specimens must be examined within 1 hour of collection.</li> </ol> <p><b>Urine:</b></p> <p><b>Onsite collections ONLY:</b></p> <ol style="list-style-type: none"> <li>1. Collect mid-day urine specimen in a sterile container. Peak egg excretion occurs between noon and 3 p.m.</li> <li>2. For patients with hematuria, eggs are associated with the terminal (last voided) portion of the specimen containing blood and mucus.</li> <li>3. Transport directly to the laboratory (<math>\leq 15</math> min) since specimens must be examined within 1 hour of collection.</li> </ol>
<b>Transport/Storage:</b>	Transport to the Microbiology Laboratory immediately at room temperature. <b>Do not</b> refrigerate specimen. Refrigeration inhibits the motility of certain parasites.

**Sample Rejection:** Specimen with a transit time exceeding 1 hour after collection; specimen not submitted in appropriate transport container; improperly labeled specimen; insufficient volume; external contamination. If an unacceptable specimen is received, the physician or nursing station will be notified and another specimen will be requested before the specimen is discarded.

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### ***Interpretive***

**Reference Range:** No ova or parasites seen.

**Limitations:** This procedure does not detect *Cryptosporidium parvum*. Refer to the specific listing for [Cryptosporidium/Giardia FA](#).

**Methodology:** Concentrated microscopic exam and trichrome stain

**References:** Cook, JH, and M Pezzlo (1992). Specimen receipt and accessioning. Section 1. Aerobic bacteriology, 1.2.1-4. In HD Isenberg (ed) Clinical Microbiology Procedures Handbook. American Society for Microbiology, Washington DC

Miller, J Michael (1999) A Guide To Specimen Management in Clinical Microbiology, American Society for Microbiology, Washington DC

Miller, J Michael, and HT Holmes (1999) Specimen Collection, Transport, and Storage In PR Murray et al, (ed), Manual of Clinical Microbiology, 7<sup>th</sup> edition, American Society for Microbiology, Washington DC, pp 33-104

**Updates:** 11/20/2014: Onsite collections ONLY