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| MSH/TML Shared Microbiology Service Policy & Procedure Manual | Policy # MI\PAR\05\01\v01 | Page 1 of 1 |
| Section: Parasitology Manual | Subject Title: Laboratory Procedures for Stool Examination | |
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INTRODUCTION

The usual diagnostic stages of intestinal parasites are helminth eggs and larvae and protozoan trophozoites and cysts. In general, nematodes, such as *Ascaris*, Hookworm and *Trichuris* shed eggs more or less constantly and may be detected daily in feces. Other parasites, especially protozoa, are passed irregularly and possibly for only a few days at a time. In certain helminth infections, particularly Schistosomes, and those caused by *Diphylobothrium sp.* and *Taenia sp.*, eggs may be passed intermittently.

Most specimens will be collected in SAF preservative and the specimens must be handled so that these parasite stages, when present, will be identifiable when the specimen reaches the laboratory. Concentration and staining procedures can be performed on the same preserved sample. Inadequate samples (see criteria for rejection see page 6) are usually of little value in establishing a diagnosis and may lead to erroneous results.

The microscopic examination of the stool specimen consists of three separate techniques:

1. The direct wet smear
2. The concentration
3. The permanent stain smears.

SEE FLOW CHART ON NEXT PAGE

Because the great majority of stool specimens are now collected directly into SAF preservative the direct wet smear is no longer a mandatory part of the routine ova and parasite examination. However if fresh fecal specimens are delivered to the laboratory the direct wet smear should be performed particularly on liquid stools.