Approaches to Stool Parasitology (Recommendations for Physicians): Test Ordering

Patient and/or Situation	Test Ordered[a]	Follow-up Test Ordered
◆Patient with diarrhea and AIDS or other cause of immune deficiency ◆Potential waterborne outbreak (municipal/city water supply)	*Cryptosporidium* or *Giardia/Cryptosporidium* immunoassay	If immunoassays are negative and symptoms continue, special tests for microsporidia (modified trichrome stain) and other coccidia (modified acid-fast stain) and O&P exam should be performed
◆Patient with diarrhea (nursery school, day care center, camper, backpacker) ◆Patient with diarrhea and potential waterborne outbreak (resort setting) ◆Patient with diarrhea from areas where *Giardia* is the most common parasite found	*Giardia* or *Giardia/Cryptosporidium* immunoassay (perform testing on two stools before reporting as negative) Particularly relevant for areas of the U.S. where *Giardia* most common organism found	If immunoassays are negative and symptoms continue, special tests for microsporidia and other coccidia (see above) and O&P exam should be performed
◆Patient with diarrhea and relevant travel history ◆Patient with diarrhea who is a past or present resident of a developing country ◆Patient in an area of the United States where parasites other than *Giardia* are found	O&P exam, *Entamoeba histolytica/E. dispar* immunoassay; immunoassay for confirmation of *E. histolytica*; various tests for *Strongyloides* may be relevant (even in the absence of eosinophilia)	If exams are negative and symptoms continue, special tests for coccidia and microsporidia should be performed
◆Patient with unexplained eosinophilia and possible diarrhea; if chronic, patient may also have history of respiratory problems (larval migration) and/or sepsis or meningitis (hyperinfection)	Although the O&P exam is a possibility, the agar plate culture for *Strongyloides stercoralis* (more sensitive than the O&P exam) is recommended	If tests are negative and symptoms continue, additional O&P exams and special tests for microsporidia and other coccidia should be performed
◆Patient with diarrhea (suspected food-borne outbreak)	Test for *Cyclospora cayetanensis* (modified acid-fast stain, autofluorescence)	If tests are negative and symptoms continue, special procedures for microsporidia and other coccidia and O&P exam should be performed

[a]Depending on the particular immunoassay kit used, various single or multiple organisms may be included. Selection of a particular kit depends on many variables: clinical relevance, cost, ease of performance, training, personnel availability, number of test orders, training of physician clients, sensitivity, specificity, equipment, time to result, etc. Very few laboratories will handle this type of testing exactly the same. Many options are clinically relevant and acceptable for good patient care. It is critical that the laboratory report indicate specifically which organisms could be identified using the kit; a negative report should list the organisms relevant to that particular kit.