Infectious Diarrhea Management Guideline
Washington State Clinical Laboratory Advisory Council
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FOR EDUCATIONAL PURPOSES ONLY

The individual clinician is in the best position to determine which tests are most appropriate for a particular patient.

Evaluate the severity & duration of the diarrhea
Obtain history and physical examination (see #1-5 on reverse side)
Treat dehydration
Report suspected outbreaks (see #6 on reverse side)
Follow the flow chart below for all that apply: (see #7 on reverse side)

A. Community acquired or traveler's diarrhea
   (especially if accompanied by significant fever or blood in the stool)

   Culture or test for:
   - Salmonella
   - Shigella
   - Campylobacter
   - E.coli 0157:H7
   - Shigatoxin
   - C.difficile

   Consider:
   Quinolone for suspected shigellosis in adults (fever, inflammation);
   Macrolide for suspected resistant Campylobacter;
   Avoid antimotility or certain antimicrobial drugs if suspected STEC* (afebrile, bloody diarrhea)
   (see #8 on reverse side)

B. Nosocomial diarrhea
   (onset after more than three days in the hospital)

   Test for C. difficile in:
   -suspect nosocomial outbreaks
   -patients with bloody stools
   -infants; also add tests in Part A

   Discontinue antimicrobials if possible; consider metronidazole if illness worsens or persists.

C. Persistent diarrhea of greater than 7 days
   (especially if immunocompromised)

   Consider parasites (# 9 on reverse side)
   Giardia
   Cryptosporidium
   Cyclospora
   Isospora belli
   Inflammatory screen (# 7 on reverse side)
   If HIV positive, add
   Microsporidia
   M. avium complex
   Tests in Part A

   Treat per results of the above tests

*STEC (Shiga toxin-producing Escherichia coli)
Recommendations for the diagnosis and management of diarrheal illnesses:

1. Seafood or seacoast exposure should prompt culture for *Vibrio species*.

2. Traveler’s diarrheal illnesses that have not responded to empirical therapy with a quinolone or trimethoprim-sulfamethoxazole should be managed with the guideline on the front page.

3. Persistent abdominal pain and fever should prompt culture for *Yersinia enterocolitica* with cold enrichment. Right-side abdominal pain without high fever but with bloody or nonbloody diarrhea should prompt culture of Shiga toxin-producing *Escherichia coli* (STEC) 0157 and Shigatoxin assay.

4. Proctitis in symptomatic homosexual men can be diagnosed with sigmoidoscopy. Involvement in only the distal 15 cm suggests Herpes virus, gonococcal, chlamydial, or syphilitic infection; colitis extending more proximally suggests *Campylobacter, Shigella, Clostridium difficile*, or chlamydial (LGV serotype) infection, and noninflammatory diarrhea suggests giardiasis.

5. Postdiarrheal hemolytic uremic syndrome (HUS) should prompt testing of stools for STEC 0157 and for Shiga toxin.

6. Fecal lactoferrin testing or microscopy for leukocytes can help document inflammation, which is often present in invasive colitis with *Salmonella, Shigella, or Campylobacter*; with more severe *C. difficile* colitis, and with inflammatory bowel disease.

7. Some experts recommend avoiding administration of antimicrobial agents to persons in the United States with bloody diarrhea.

8. Commonly used tests for parasitic causes of diarrhea include fluorescence and EIA for *Giardia and Cryptosporidium*; acid-fast stains for *Cryptosporidium, Cyclospora, Isospora, or Mycobacterium species* (as well as culture for *Mycobacterium avium* complex); and special chromotrope or other stains for microsporidia. O & P examination may be performed for a broader variety of parasites.

9. Isolates should be reported to local health department as required. Consider saving culture plates and isolates and freeze whole stools or swabs at –70°C.

Reference:
IDSA Guidelines: Clinical Infectious Diseases 2001;32:331-351. Dr. Richard Guerrant, Div of Geographic & international Medicine University of Virginia