Approach to Diarrhea

ABDOMINAL

≤1%

KEY DECISION RULE
Fecal calprotectin ≤40 µg/g[9]
probability of IBD in adults with IBS-type symptoms

≥3 loose stools/d: acute <14 d, chronic >4 wk

→ Duration, blood, fever, travel, food, new drugs, antibiotics, immune status; volume status[1,11]

→ Electrolytes, creatinine if more than mild; stool tests only if they change care[1,2]

→ **Severe, bloody or high-risk?**

Yes →

High risk: rehydrate and send stool tests[1,11]

- Hypovolemia: orthostasis, AKI[1,11]
- Fever ≥38.5 °C or >6 stools/d[11]
- Sepsis: blood cultures, antibiotics[1,11]
- Bloody, afebrile: no antibiotics[1,5]
- Shock, ileus, megacolon: fulminant CDI[3]
- Immunosuppressed, ≥70, pregnant[11]

→ **Fulminant: PO vancomycin 500 mg QID + IV metronidazole; surgery[3]**

If not: how long, and which type?

	Acute infectious most; viral	**C. difficile** antibiotic use	**Chronic watery** >4 wk	**Chronic fatty** malabsorptive	**Chronic inflammatory** bloody
CAUSES	• Norovirus; traveller's E. coli • Campylobacter, Salmonella, Shigella • **Shiga toxin E. coli O157 (HUS)[1,5]**	• Antibiotics within 3 mo[3] • Hospital stay, age ≥65, PPI[3,11] • **Fulminant colitis, megacolon**	• IBS-D, microscopic colitis • Drugs, bile acid; lactose, sorbitol • Hyperthyroidism, neuroendocrine tumour	• Celiac disease • Pancreatic insufficiency • Bacterial overgrowth, short bowel	• **Colorectal cancer** • Crohn disease, ulcerative colitis • Ischemic, radiation, CMV colitis
CLUES	• Large, watery: small bowel[11] • Blood, tenesmus, fever: colonic[11] • Travel, food, sick contacts	• ≥3 unformed stools in 24 h[3] • Fever, ↑WBC, abdominal pain	• Osmotic gap >125 mOsm/kg: osmotic[11] • Gap <50, persists fasting: secretory[11]	• Greasy, foul, floating stools • Weight loss; low iron or B12	• Onset >50 y, blood, nocturnal[8,11] • Weight loss, anemia, fever
WORKUP	• None if mild and not high-risk[1,2] • Stool culture or PCR if severe[1] • Shiga toxin if bloody[1]	• Test only if not on laxatives[3] • Severe: WBC ≥15 ×10⁹/L[3] • Severe: Cr >133 µmol/L (1.5 mg/dL)[3]	• CBC, TSH, tTG, Giardia[8,10] • Calprotectin ≤40 µg/g: IBD unlikely[9] • Colonoscopy + biopsy if alarm[8,11]	• tTG-IgA with total IgA[8,10] • Fecal elastase[8]	• Stool culture, C. diff; calprotectin, CRP[9,11] • Colonoscopy with biopsies[8]
MANAGE	• Oral rehydration[1,2] • Loperamide if no fever or blood[1,2] • Azithromycin: febrile dysentery, travel[1]	• Stop antibiotics; fidaxomicin 200 mg BID[3,4,6] • Or PO vancomycin 125 mg QID; each ×10 d[3,4] • Recurrent: fidaxomicin; FMT after 2nd[3,4,7]	• Stop culprit drugs and sugars • Budesonide: microscopic colitis[8] • Bile acid binder for bile acid[8]	• Duodenal biopsy, then gluten-free diet[8] • Pancreatic enzymes with meals[11]	• GI referral; treat IBD • Cancer: staging and surgery

Stethopedia
stethopedia.ca/approach/diarrhea

Evidence [1] Shane 2017, Clin Infect Dis [2] Riddle 2016, Am J Gastroenterol [3] McDonald 2018, Clin Infect Dis [4] Johnson 2021, Clin Infect Dis [5] Wong 2000, N Engl J Med [6] Louie 2011, N Engl J Med [7] van Nood 2013, N Engl J Med [8] Arasaradnam 2018, Gut [9] Menees 2015, Am J Gastroenterol [10] Smalley 2019, Gastroenterology [11] Manual 2024–25, pp. 74, 121