

Shigella spp. Shigella spp. (*S. dysenteriae*, *Shigella flexneri*, *Shigella boydii*, and *Shigella sonnei*) are nonmotile; lysine decarboxylase–negative; citrate–, malonate–, and H₂S–negative; non–lactose fermenting; gram–negative rods that grow well on MacConkey agar. All strains ferment glucose without gas production, except a few strains (*S. flexneri* serotype 6 and *S. boydii* serotype 14). The four subgroups of *Shigella* spp. are *S. dysenteriae* (group A), *S. flexneri* (group B), *S. boydii* (group C), and *S. sonnei* (group D). Each subgroup has several serotypes. Serotyping is based on the somatic LPS O antigen. *Shigella* and inactive *E. coli* strains are often very difficult to distinguish. After presumptive identification of a suspected *Shigella* species based on traditional biochemical methods, serotyping should be completed, especially in the case of *S. dysenteriae*. Suspected strains of *Shigella* spp. that cannot be typed by serologic methods should be referred to a reference laboratory for further testing. Shigellosis may begin as watery diarrhea, fever, and abdominal cramps. Progressive infection then leads to dysentery with stools that contain blood or mucus. Lesions in the intestinal tract typically remain confined to the large intestine. Bloodstream infections are rare. All *Shigella* are capable of causing dysentery. However, *S. dysenteriae* 1 produces the most severe forms of illness and may lead to hemolytic uremic syndrome (HUS).